

AGRICULTURAL OUTLOOK

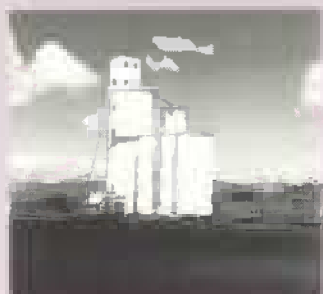
Economic Research Service
United States Department of Agriculture

April 1992



Trends in
WORLD MEAT TRADE

AGRICULTURAL OUTLOOK



Departments

2 Commodity Overview

12 Commodity Spotlight

Global Meat Consumption & Trade

*Shayle Shagam &
Linda Bailey*

15 World Agriculture & Trade

Fresh Fruit Leads Chile's Export Mix
Poland's Sugar Industry: Barometer of Change

*Amy Sparks & Carlos Arnade
Ron Lord*

20 Farm Finance

Farm Income To Dip Below Last Year

Bob McElroy

22 Food & Marketing

1992 Food Price Update

Ralph Parlett

Special Articles

26 U.S.-Mexico Linkages: Labor & Investment

Mexican Workers: A Key Source of U.S.
Farm Labor

*James A. Duffield &
Shannon Hamm*

Mexico's Food Industry Draws
U.S. Investment

Charles R. Handy

32 Prospects for Trade with an Integrated Korean Market

John Dyck

Statistical Indicators

37 Summary

38 U.S. & Foreign Economic Data

39 Farm Prices

40 Producer & Consumer Prices

42 Farm-Retail Price Spreads

43 Livestock & Products

47 Crops & Products

51 World Agriculture

52 U.S. Agricultural Trade

55 Farm Income

59 Food Expenditures

59 Transportation

60 Indicators of Farm Productivity

61 Food Supply & Use

Economics Editor—Barbara A. Claffey (202) 219-0313

Associate Editor—James H. Hauver (202) 219-0313

Managing Editor—Mary Reardon (202) 219-0494

Statistical Coordinator—Ann Duncan (202) 219-0313

Design & Layout Coordinator—Victor Phillips, Jr.

Production Staff—Karen Sayre & Cilla Peterson

Composition—Joyce Bailey

The contents of this magazine have been approved by the World Agricultural Outlook Board, and the summary was released March 19, 1992. Price and quantity forecasts for crops are based on the March 11 World Agricultural Supply and Demand Estimates.

Materials may be reprinted without permission. *Agricultural Outlook* is printed monthly except for the January-February combined issue.

Annual subscription: \$26 U.S., \$32.50 foreign (includes Canada). Order from ERS-NASS, P.O. Box 1608, Rockville, MD 20849-1608. Or call toll free, 1-800-999-6779 (8:30-5:00 E.T.). Make check payable to ERS-NASS.

Time to renew? Your subscription to *Agricultural Outlook* expires in the month and year shown on the top line of your address label. Renew by calling 1-800-999-6779.

The next issue of *Agricultural Outlook* (AO-185) is scheduled for mailing on May 5. If you do not receive AO-185 by May 26, call the managing editor at (202) 219-0494 (be sure to have your mailing label handy). The full text of AO-185 will also be distributed electronically; additional information on this is available at (202) 720-5505.

News of Food Prices, World Meat Consumption, U.S.-Mexico Labor and Investment, and Korean Trade Prospects

The Consumer Price Index (CPI) for food is expected to increase a modest 2 to 4 percent in 1992, with prices of some foods actually declining from 1991 levels. Slow recovery from the recession along with increased supplies of several foods will be the major factors influencing food price changes this year.

Among the foods in ample supply are meats—beef, pork, and poultry. Beef supplies are expected to increase for at least the next several years, as the current cattle cycle continues its modest expansion. And consumers will find plenty of eggs for the Easter season, with prices lower than a year ago.

By contrast, world wheat ending stocks for the 1991/92 season are forecast off nearly 11 percent, import demand is expected near record, and wheat prices have risen sharply. Global ending stocks are expected to drop as U.S. stocks shrink to the lowest level since 1973/74 in response to expanding total use that sharply exceeds the reduced crop.

Higher wheat prices will help U.S. grain farmers, but U.S. consumers will hardly notice the increase. For 1992, both food and feed grain receipts are forecast at the highest level in 6 years. But the farm value of wheat in a loaf of bread is a small enough share so that, even if farm prices for wheat doubled, the consumer would pay on average only a few cents more for a \$1 loaf of bread.

Net farm income for U.S. agriculture in 1992 is currently forecast 3-5 percent below 1991's \$42 billion. The farm income forecast reflects mixed news for different sectors—crop receipts could increase 2 percent this year while livestock receipts fall 3 percent. Both cash and total production expenses are forecast up 3 percent this year, much of the rise due to expanded acreage and increased demand for inputs.



Agricultural Outlook continues to follow events unfolding throughout the world that have implications for U.S. and global agriculture. This month, *AO* looks at developments on four continents—from Chile's fruit sector to Poland's sugar industry, and from North-South Korean reconciliation prospects to U.S.-Mexico labor and investment issues.

A lesson learned by many economies as they develop is that diversification—both in agriculture and agricultural exports—provides substantial benefits to farmers and agriculture, and the economy in general. Chile is among the developing economies diversifying agricultural exports—from the traditional beans, lentils, and wool, to nontraditional fruits and vegetables. The success of Chile's market- and export-oriented agriculture has come to be viewed as a model for other developing economies.

Poland's sugar industry illustrates the challenges facing agriculture in the former planned economies of Central and Eastern Europe (CEE's) and the Soviet

Union. Agricultural policies are still evolving in these countries, and among the challenges is the reform of antiquated industries. Even modest changes in infrastructure, however, could dramatically boost the efficiency and output of agriculture, including sugar, in the CEE's and former Soviet Union.

The political winds of change have blown steadily eastward, from East Germany to the former Soviet Union, continuing on to North and South Korea, and offering prospects for reunification or reconciliation between the two Koreas. *AO* contrasts the Korean economies, and points out potential trade opportunities between the two, as well as for other international trading partners, with improved relations.

The third installment of the *AO* series on U.S.-Mexico relations looks at two important issues related to agriculture. The first is migrating labor from Mexico to the U.S., supplying a key source of seasonal farm labor for the nation's fruit and vegetable producers. Meanwhile, an improved investment climate in a more liberal Mexican economy has expanded U.S. direct investment and joint venture opportunities for processed foods in Mexico. In 1991, sales by U.S. food processing affiliates located in Mexico were nearly three times the export sales of U.S. food processing firms to Mexico.

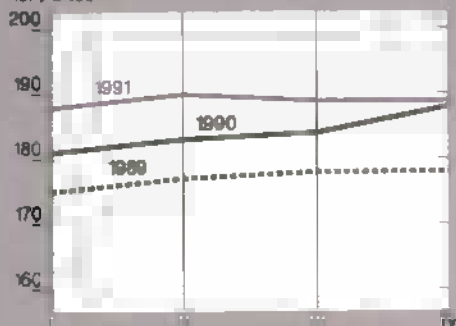
Over the past 10 years, worldwide meat consumption patterns have changed considerably. Government regulations, changing lifestyles and incomes, and attitudes about the relationship of meat consumption to health, as well as technological change, are among the factors reshaping world demand. Although meat production has grown steadily over the past decade and trade is brisk in some markets, trade is actually a small share of total output, while consumption and production remain concentrated among a few countries and regions.

Commodity Overview

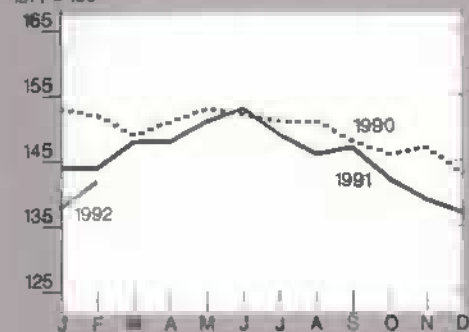
Prime Indicators

Index of prices paid by farmers

1977 = 100

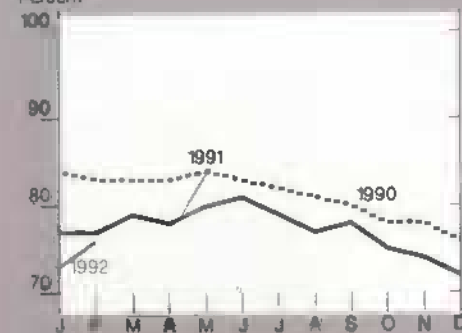
Index of prices received by farmers¹

1977 = 100

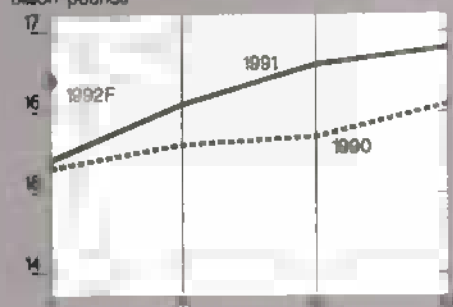


Ratio of prices received/prices paid

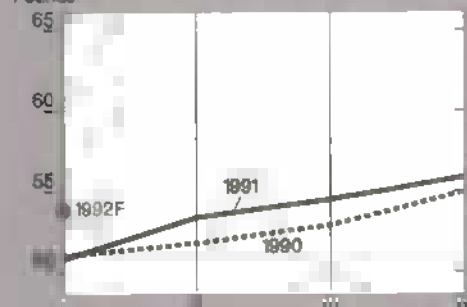
Percent

Total red meat & poultry production²

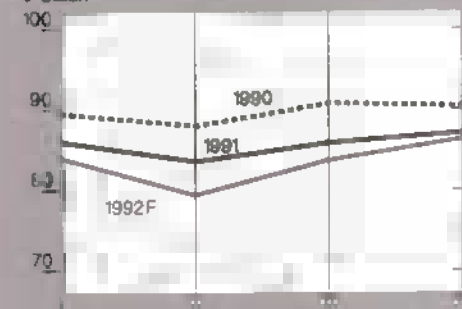
Billion pounds

Red meat & poultry consumption, per capita^{2,3}

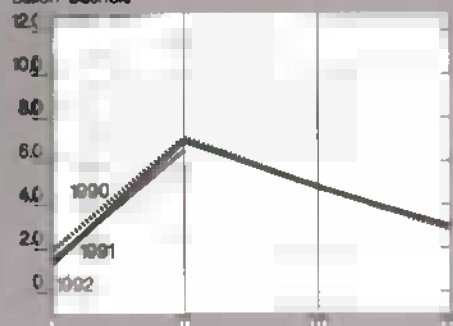
Pounds

Cash receipts from livestock & products⁴

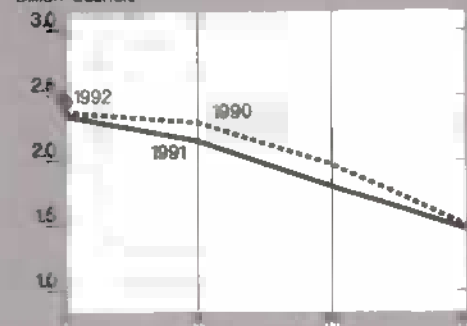
\$ billion

Corn beginning stocks⁵

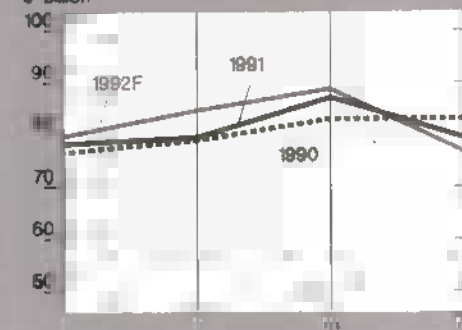
Billion bushels

Corn disappearance⁵

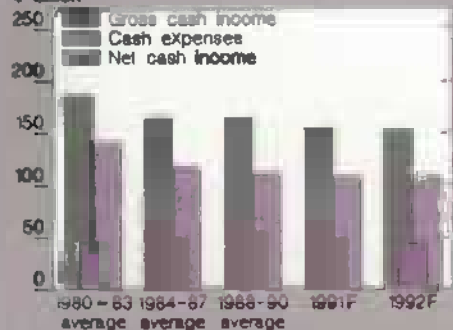
Billion bushels

Cash receipts from crops⁴

\$ billion

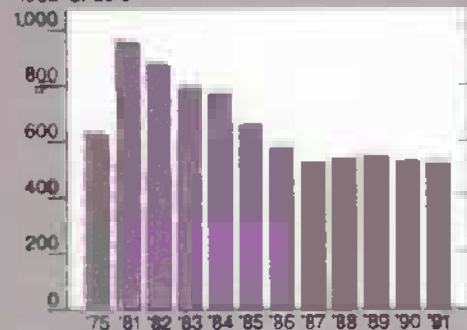
Real cash income (1987 \$)⁶

\$ billion



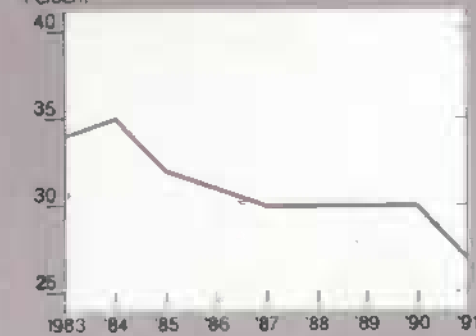
Average real value of farm real estate

1982 \$/acre



Farm value/retail food costs

Percent



¹For all farm products. ²Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. ³I=Sept.-Nov.; II=Dec.-Feb.; III=Mar.-May; IV=June-Aug. Marketing years ending with year indicated.

³Retail weight. ⁴Seasonally adjusted annual rate.



Field Crops Overview

With world carryover of wheat forecast off nearly 11 percent from last year and with near-record imports, wheat prices have risen sharply in 1991/92. These price gains likely will encourage larger U.S. spring wheat and Southern Hemisphere plantings for 1992/93.

By contrast with a buoyant wheat market, U.S. corn exports and market share are projected off in the face of sharp competition from other corn exporters. U.S. soybean exports were up sharply early in the 1991/92 season because of short Brazilian supplies from last year and reduced competition from China. But greater South American competition is expected after April harvests in Brazil and Argentina. [For the latest U.S. crop conditions and outlook, see tables 17-19. World outlook estimates are in table 23.]

World Wheat Stocks Off More Than 10 Percent

With world wheat ending stocks forecast off nearly 11 percent and near-record import demand, wheat prices have risen sharply in 1991/92. Global ending stocks will drop as U.S. stocks shrink to the lowest level since 1973/74, following

expanded total use that sharply exceeds the smaller crop.

World production is estimated at 547 million tons, 8 percent below 1990/91. While forecast world consumption is down 2 percent, it is still well above production. Thus, world ending stocks are projected at nearly 126 million tons, 15 million below beginning stocks and the lowest in 2 years.

Imports are forecast to rise 14 percent in 1991/92 to a near-record 106 million tons largely because of strong purchases by two major importers—the former Soviet Union and China. China is increasing imports to satisfy urban demand. Imports by the former USSR, however, continue to depend on the availability of financial assistance. Despite credit guarantee offers from major exporters, particularly the EC, problems relating to financing, freight arrangements, and contractual agreements have slowed the delivery process.

In addition, recent sales to Brazil and Morocco have been stronger than anticipated. Brazil's crop was very low for the second year in a row, and imports are forecast up 38 percent. Severe drought in Morocco during the winter wheat sea-

son led to concerns about 1992/93 production, and the pace of imports has stepped up in the last half of 1991/92.

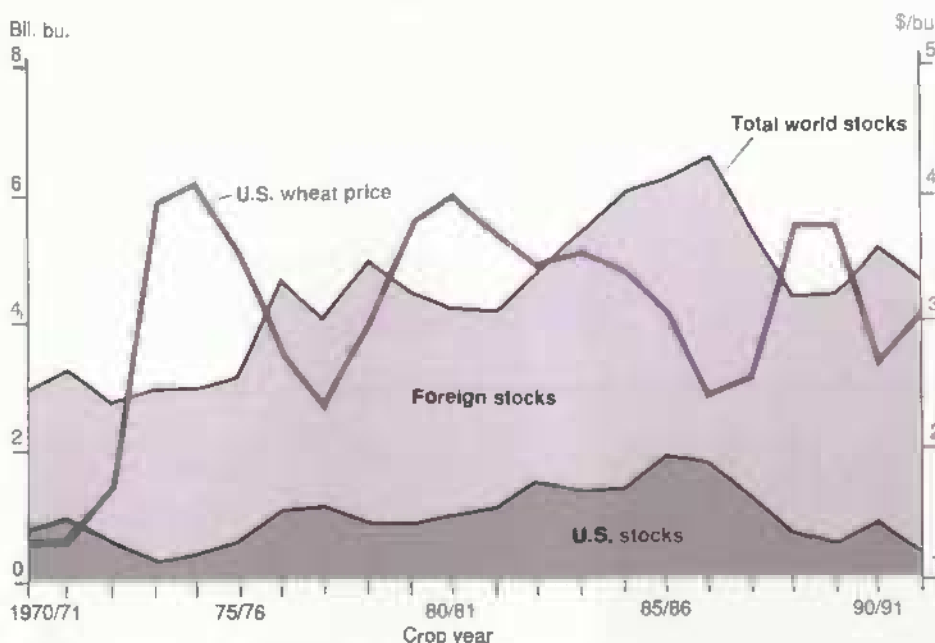
Barring crop failures in key exporting or importing countries, world prices and stock levels are not expected to reach a crisis situation. Winter wheat production in several major producing countries is likely to be up. And if prices remain high, planting in Australia and Argentina is expected to increase, as is spring wheat planting in the Northern Hemisphere.

Larger 1992 U.S. Wheat Crop Likely

Prospects for 1992 are for a larger U.S. wheat crop, despite smaller winter wheat seedings. Although several areas have reported less than ideal winter wheat conditions, no compelling evidence indicates that yield prospects are outside the range of average-to-trend levels.

Weather has been mild in the Southern Plains over much of the winter, with temperatures in the major growing areas averaging 2-5 degrees above normal in December, 2-14 degrees above normal in January, and 6-10 degrees above normal in February. The mild weather was par-

U.S. Wheat Prices Gain As Stocks Shrink

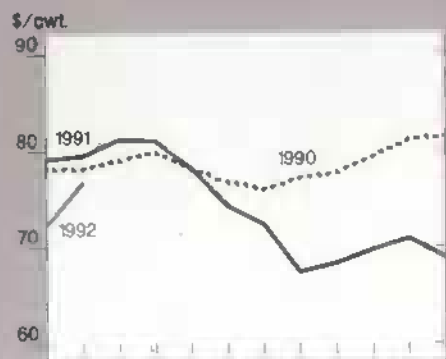


Ending stocks, crop year. Season-average price received by farmers.

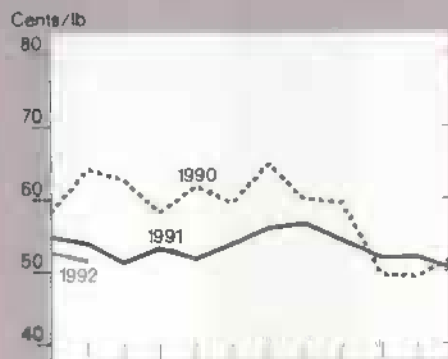
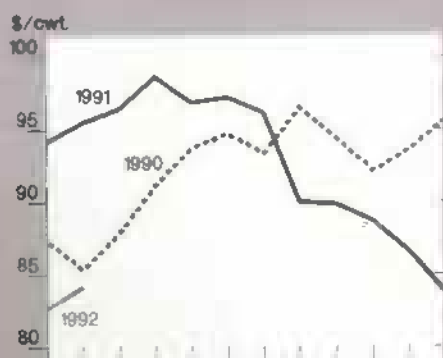
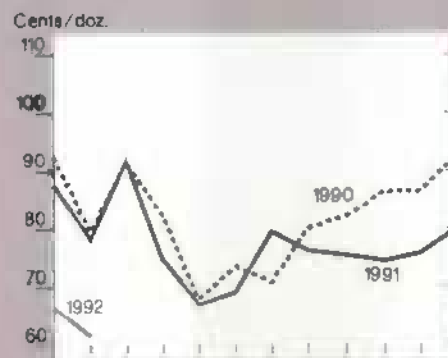
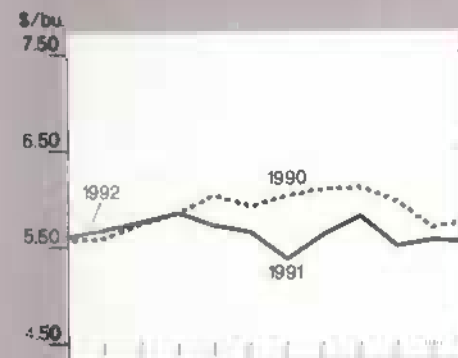
Commodity Overview

Commodity Market Prices

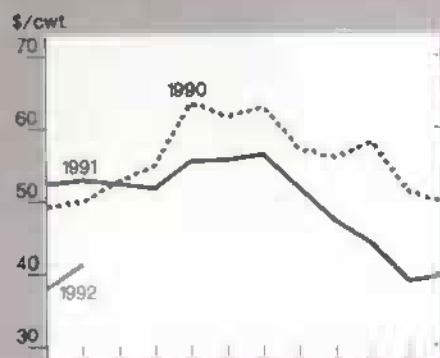
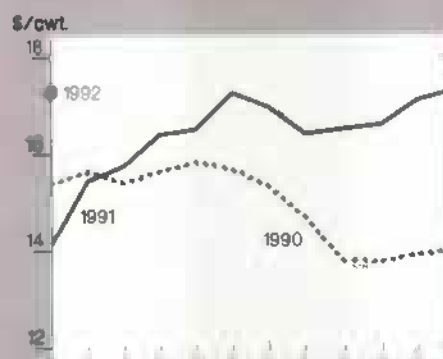
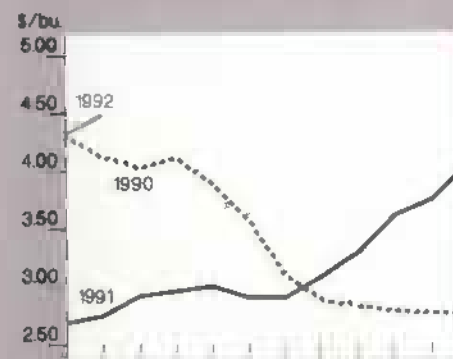
Choice steers, Nebraska



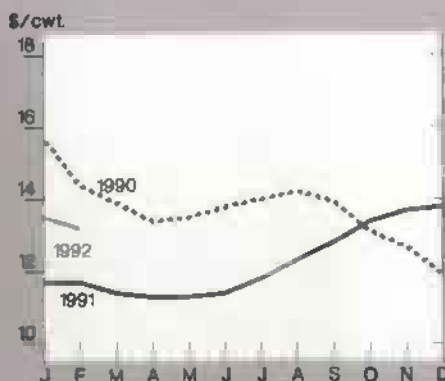
Broilers, 12-city average

Corn, Central Illinois¹Medium steers, Oklahoma City²Eggs, New York³Soybeans, Central Illinois⁴

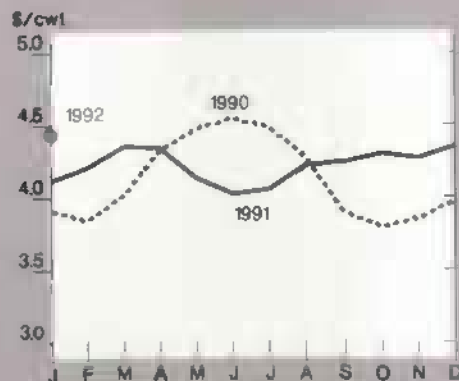
Barrows and gilts, 6 markets, Omaha

Milled rice, SW Louisiana⁵Wheat, Kansas City⁶

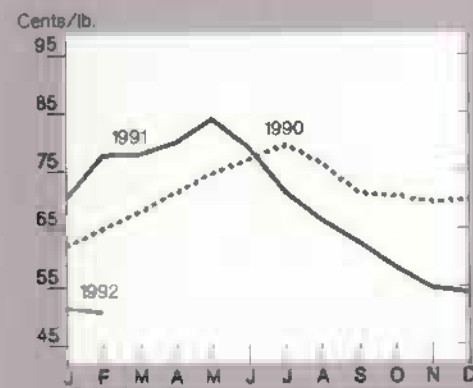
All milk



Sorghum, Kansas City



Cotton, average spot market

¹No. 2 yellow. ²600-700 lbs. medium no. 2. ³Grade A large.⁴No. 1 yellow.⁵U.S. No. 2 long-grain.⁶No. 1 HRW.

Credit Remains Critical for Soviet Purchases of U.S. Grain

	Fiscal 1991 credits	Fiscal 1992 ¹ credits	Credits remaining for use in April
		\$ million	
Feed grains	1,103	437	52
Wheat and flour	253	711	90
Protein meals	381	253	51
Soybeans	123	107	15
Other commodities	52	72	17
Freight	NA ²	NA ²	25
Total	1,912	1,580	250

¹ Through March 13. ² NA = Not applicable. Total includes freight of \$155 million in FY 1991 and \$175 million in FY 1992.

ticularly favorable to winter wheat development after poor emergence last fall. Although half of the Kansas wheat crop was rated in poor to very poor condition at the end of November, wheat crop conditions by February were reported mostly good.

At spring planting time, producers of spring wheat are seeing much stronger prices than last fall. These higher prices, together with 1992's smaller ARP, will likely boost spring wheat acreage sharply over last year. A review of futures prices shows market returns not only favor planting wheat on wheat flex acres, but also on flex acres of other crop bases, such as barley and oats.

Looking back at the current crop year, the 1991 U.S. wheat crop totaled 1.98 billion bushels, down about 28 percent from 1990/91. With total use projected up about 2 percent, ending stocks on May 31, 1992 are forecast at 390 million bushels, the lowest since 1973/74.

Total U.S. wheat use in 1991/92, at 2.49 billion bushels, is forecast higher than a year earlier due entirely to a forecast 19-percent increase in exports. In contrast, domestic wheat use, at slightly less than 1.22 billion bushels, is forecast down 11 percent from last year, due mainly to a drop in feed and residual use. The fall in feed and residual use is due to higher wheat prices this season, which are projected at \$3-\$3.10 per bushel, up from \$2.61 in 1990/91.

Foreign Corn Export Competition Strong

Foreign corn production is forecast up 5 percent to a record in 1991/92, despite sharp production declines in South Africa and other southern African countries due to worsening drought. Production in South Africa is forecast off 45 percent, to just 4.5 million tons, and output in Zimbabwe and other African countries is also expected to fall sharply. Far from adding to export competition as usual, South Africa will need to import corn this season.

But large exportable supplies elsewhere are keeping export competition strong. Foreign corn exports are forecast at about 19 million tons, up nearly 50 percent from 1990/91. China's second-largest crop, coupled with high ending stocks from its 1990/91 record crop, points to a second consecutive year of record exports. Argentina is also expected to boost corn exports because of higher production. Output there is forecast up 18 percent, reflecting very favorable growing conditions. Canada, the EC, and Eastern Europe, which normally do not export much corn, are shipping significant amounts this season following larger harvests.

Weaker demand overall and stronger competition will contribute to a downturn in U.S. exports and export share. U.S. corn exports are forecast to drop to 39 million tons, with market share falling to 67 percent, the lowest since 1985/86.

Tight U.S. Wheat Supplies Help Corn Feeding

Domestic corn use in 1991/92 is projected up 6 percent from last year, at 6.4 billion bushels. Feed and residual use is poised to reach 5 billion bushels, eclipsing the 1987/88 record of 4.8 billion bushels. This jump is due in part to larger livestock inventories, expected lower wheat feeding this summer, and relatively tight supplies of sorghum and oats.

However, total U.S. corn use in 1991/92 is forecast up only 2 percent from last year, at just over 7.9 billion bushels. A projected decline of more than 10 percent in U.S. corn exports will limit gains in total use.

With 1991/92 production at just under 7.5 billion bushels, ending corn stocks are forecast at 1.091 billion bushels. The stocks-to-use ratio is projected at 13.8 percent, the lowest since 1975/76. As a result, the season-average price for corn is forecast at \$2.30-\$2.60 per bushel, compared with \$2.28 last year. Sorghum and oats prices are also higher in 1991/92.

High U.S. Rice Prices Clip Market Share

U.S. total rice use in 1991/92 is forecast at 155.3 million cwt, down about 4.5 percent from last year. Domestic use continues to grow and is forecast at 95.3 million cwt, up nearly 4 percent from 1990/91. However, 1991/92 (August/July) exports are projected down 15 percent from last year, as high U.S. prices have effectively shut the U.S. out of some export markets.

Total U.S. supplies are above total use, leaving ending stocks projected up 21 percent from last year, at 29.7 million cwt. This situation is boosting the stocks-to-use ratio from 15 to 19 percent, with 1991/92 the first year since 1987/88 when the stocks-to-use ratio will exceed 17 percent. However, the stocks-to-use situation still remains relatively tight.

Commodity Overview

U.S. rice prices are projected to range between \$7.20 and \$7.50 in 1991/92, well above \$6.70 in 1990/91. In addition to higher world prices this year, the U.S. premium over world prices is currently 20 cents per cwt higher than last year. These higher U.S. prices are due largely to strong domestic use and slow marketings by producers.

World production in 1991/92 is estimated at 347 million tons (milled basis), down slightly but second to last season's record. Output in Thailand and Vietnam is significantly higher than in 1990/91, allowing each to export at prices lower than those offered by the U.S., whose 1992 calendar-year market share is projected to fall to 16 percent from 18 percent in 1991. Calendar 1992 world rice trade is projected up 8 percent to 13.4 million tons, with increases forecast in Indonesia and the Middle East.

Smaller Foreign Supplies Boost U.S. Soybean Exports

Soybean export competition was down sharply early in the 1991/92 season because of short Brazilian supplies last year and reduced competition from China, a major Northern Hemisphere producer. China's smaller crop lowered the country's forecast exports of both soybeans and soybean meal in 1991/92, and boosted its expected soybean imports.

Global soybean imports in 1991/92 are also expected higher in many of the major markets—the EC, the former Soviet Union, Central and Eastern Europe, Japan, and South Korea. Even Brazil, in advance of harvest in April, is importing soybeans because of last season's short crop. World trade in soybeans is forecast at 26.9 million tons, 1.8 million over last year.

With the U.S. in position as main supplier early in the season, U.S. 1991/92 exports of soybeans and soybean meal are forecast up sharply. As of the end of February, U.S. exports were averaging 35 percent above the previous year. U.S. soybean exports for 1991/92 are estimated at 18.1 million metric tons, up 19 percent, with exports of soybean meal at 5.8 million metric tons, up 16 percent.

(The soybean meal export estimate was recently revised to incorporate soybean hulls into the total.)

But greater South American competition is expected after the April harvest. Brazil's 1991/92 crop got off to a good start with favorable growing conditions and an increase in area planted. Yields are forecast up from 1990/91's drought-stunted levels. Production is forecast at 18.5 million tons, up 17 percent.

While Argentina's exports of soybeans are projected down for 1991/92, they will still be relatively high compared with recent seasons. Soybean meal exports are forecast up slightly. Strong exports reflect continued large output. Argentine production for 1991/92, projected at 10.5 million tons, is under its 1990/91 record, but still the third largest. Also, Paraguay is expecting increased production and exports of soybeans and soybean meal this year.

While U.S. soybean exports are forecast up from 1990/91, so is domestic crush, which is projected at 1.23 billion bushels. Overall, total U.S. disappearance is forecast nearly 9 percent higher, at nearly 2 billion bushels.

With 1991/92 U.S. supplies pegged at 2.32 billion bushels, ending stocks are forecast near last year's level, at 325 million bushels. This year's larger expected Southern Hemisphere production will likely dampen U.S. soybean price increases, with season-average prices forecast to range from \$5.35 to \$5.85 per bushel, compared with 1990/91's \$5.75.

World Cotton Stocks Expand, Prices Dive

World cotton production is forecast to jump 10 percent in 1991/92 to a record 95.5 million bales. Production in China increased 26 percent and Pakistan's output advanced 29 percent over 1990/91. With consumption stagnant at 86 million bales, virtually the same as in the last two seasons, ending stocks are forecast at 38 million bales, up 35 percent from last year and the highest level since 1986/87. World prices have plummeted since the beginning of the season.

World exports, at 23 million bales, are estimated down slightly for the third year in a row. Consumption and imports in several major markets are projected down, including the EC, Eastern Europe, Japan, Taiwan, and Hong Kong. Growth in consumption and imports is off in part because of sluggishness in the world economy and in world textile industries, which are sensitive to economic trends. Rising competition from lower cost textile imports in these markets also continues to depress demand.

With reduced demand and larger foreign supplies, U.S. exports and market share are expected to return to more average levels compared with relatively high 1990/91 levels. U.S. exports are estimated at 6.8 million bales, down 13 percent, and U.S. market share is estimated at 30 percent, down 4 percentage points from last season but still above average.

Foreign exports, however, are estimated up almost 6 percent to 16.1 million bales, a significant gain in competition. Pakistan's exports are projected to rise sharply to 2.3 million bales after a second consecutive year of record production. China produced its second-largest crop ever, and its exports also will rise as its imports decline sharply. Other major exporters, including Australia, the French-speaking countries of West Africa, and Paraguay, also expect strong export growth because of record or near-record outturn.




Exports from the former Soviet Union are also projected up, despite the lower crop, as some of the large 1990/91 ending stocks reach markets. But with 1991/92 Soviet exports still suffering from marketing difficulties and hindered by the slow pace of economic restructuring, ending stocks are expected to build further in 1991/92.

China's ending stocks are also rising as China cuts consumption in an effort to eliminate textile overcapacity. Large stocks of these two major export competitors—China and the former USSR—suggest strong export competition could continue into 1992/93. This might occur even as lower prices and higher stocks generally discourage production gains.

Total U.S. cotton disappearance in 1991/92 is estimated at 16.1 million bales, down 2 percent from last year. Although U.S. exports are down, domestic cotton mill use, estimated at 9.3 million bales, is the largest since 1966/67. This strong showing is mainly due to high U.S. denim usage and larger exports of domestically produced cotton textiles.

U.S. cotton production for 1991/92 totaled 17.5 million bales, up 13 percent from last year and the largest output since 1937. With larger production and stable use, U.S. cotton stocks are expected to rebuild this season. Ending stocks in 1991/92 are forecast to reach 3.9 million bales, about 66 percent above the carryin level, bringing the stocks-to-use ratio to 24 percent, compared with last year's 14.2 percent. [Joy Harwood (202) 219-0840 and Carol Whitton (202) 291-0824]

For further information, contact: Sara Schwartz, world food grains; Edward Allen, domestic wheat; Janet Livezey, domestic rice; Pete Riley, world feed grains; Tom Tice and Jim Cole, domestic feed grains; Nancy Morgan, world oilseeds; Roger Hoskin and Scott Sanford, domestic oilseeds; Carol Whitton, world cotton; Bob Skinner and Les Meyer, domestic cotton. World information (202) 219-0820; domestic (202) 219-0840. 

Livestock, Dairy & Poultry Overview

Beef supplies are expected to increase for at least the next several years. The current cycle appears headed toward modest expansion, perhaps similar to the mid-1960's when little or no liquidation phase occurred. The expansion is likely to continue in 1993, with output exceeding population increases for the first time in 6 years.

After averaging \$37 per cwt in January, hog prices rallied briefly in February, averaging \$40 per cwt. But a continued sluggish economy, pickup in slaughter rate, and weakening beef prices dampened the rally. By the end of February, prices were below \$40 per cwt, and are expected to remain at that level until slaughter rates drop seasonally in mid-to late spring.

Consumers will find plenty of eggs for the Easter season, with prices lower than a year ago. And second-quarter broiler production will likely increase to around 5.2 billion pounds, but lagging the robust 7-percent growth of a year earlier. [For the latest estimates for livestock, dairy, and poultry markets, see tables 10-16.]

Beef Output To Rise In 1992

Beef supplies are expected to increase for at least the next several years. The current cycle appears headed toward modest expansion, perhaps similar to the mid-1960's when little or no liquidation phase occurred. The expansion is likely to continue in 1993, with output exceeding population increases for the first time in 6 years.

Beef production is expected to rise 2 percent in 1992. Fed cattle marketings, after a slight dip in 1991, are expected to rise 1 to 2 percent this year, and cow slaugh-

ter may rise nearly 2-3 percent from last year's cyclical low.

Nearly all of the increase in cow slaughter will be older cows that were kept to give birth one more time. Cattle weights are expected to average near or slightly above last year's record. The largest year-to-year production increase is likely in the first half of 1992, and near to slightly above a year earlier during the second half.

Several factors will contribute to the expanding beef output next year:

- a buildup in the cattle inventory and a larger calf crop are expected this year, increasing the number of cattle available for slaughter;
- a slower pace of herd expansion means more heifers are available for placement in feedlots and eventual slaughter;
- dairy calves—previously slaughtered for veal—are being placed in feedlots in increasing numbers; and
- the gradual shift toward heavier slaughter weights is expected to continue.

Boxed beef (wholesale) prices rose over \$10 per cwt from December, to around \$121.50 by February, the highest since late spring 1991. However, March prices were erratic, ranging from \$117 to \$122 a cwt. Normally, rising wholesale prices would put upward pressure on retail prices. While retail prices are likely to rise to the mid-\$2.80's per pound, additional increases are unlikely given the large meat supplies and the economy's doldrums. Retail prices for Choice beef in February averaged \$2.82 a pound, well below the \$2.92 of a year earlier.

After rising slightly in December, the farm-retail spread narrowed in January and February. Most of the decline in the spread occurred at the wholesale-retail level; while the farm-wholesale spread declined 9 percent from December to February, the wholesale-retail spread dipped by more than 16 percent.

Commodity Overview

Hog Price Rally Is Short-Lived

After averaging \$37 per cwt in January, hog prices rallied briefly in February, averaging \$40 per cwt. The rally was due to a seasonal drop in slaughter rates, speculation about increased exports to former Soviet republics, and some spillover effect from higher beef prices. But a continued sluggish economy, pickup in slaughter rate, and weakening beef prices dampened the rally. By the end of February, prices were in the high \$30's per cwt, and are expected to remain at that level until slaughter rates drop seasonally in mid- to late spring.

The brief price rally improved producer returns somewhat, but receipts will probably remain below total costs through most of the year. The low returns are expected to prompt producers to cut breeding inventories by late 1992. Increased culling and reduced retention of female stock will also help produce record output in 1992 and place additional supplies on the market into 1993. If producers do wait until late 1992 to cut back breeding inventories, year-over-year declines in

pork production would not show up until late 1993.

For this year, production is expected to be up 7 percent, setting a record. Expanding pork supplies at sharply lower prices will ensure that pork remains attractive to consumers. Retail prices in February averaged \$2 a pound, 7 percent below a year earlier. Retail prices for the year are expected to decline 8 to 10 percent from 1991.

U.S. pork imports totaled 775 million pounds in 1991, with most major sources registering declines. With large Canadian pork supplies, and a near doubling of the countervailing duty on Canadian hogs exported to the U.S., imports of pork from Canada were expected to increase. However, pork imports remained low while live hog imports from Canada increased over 1990 levels. Reduced imports from Denmark and Poland throughout most of the year, together with little increase in canned product imports for the holidays, put U.S. pork imports 14 percent below 1990.

Although Poland, Denmark, and Canada are all expected to increase pork produc-

tion this year, any rise in U.S. pork imports is likely to come from Canada. Poland can ship only canned products, and faces problems revitalizing its food processing industry, while Denmark appears to be focusing on the EC for sales expansion. U.S. imports in 1992 are expected to increase slightly over 1991.

U.S. pork exports increased 19 percent in 1991, to 283 million pounds. Sales to Japan—which generally account for about half of U.S. pork exports—were off 2 percent during the year. The U.S. also lost some market share as Japan boosted imports an estimated 15 percent, purchasing from other suppliers. U.S. exports did get a boost, however, from a 114-percent increase in sales to Mexico, and a 19-percent hike in sales to Canada.

The pork export outlook for this year appears favorable, up a potential 8 percent over last year. Mexico is expected to remain a strong market for U.S. pork in 1992. Japanese production is expected to decline further, and lower U.S. prices may help retrieve some of the Japanese market share in 1992. Indications are that Taiwan will increase production in 1992 and will continue to be a major player in the Japanese market.

No Hunting Needed For Easter Eggs

Consumers will find plenty of eggs for the Easter season, with prices lower than a year ago. First-quarter table-egg production increased about 1 percent from a year earlier, while production during the second quarter is likely to be only fractionally above last year. Producers will likely begin to reduce the table-egg flock after Easter in response to lower net returns. For the entire year, table-egg production is expected to come in just under 1991's 4.95 billion dozen.

About 60 percent of U.S. eggs are produced in 10 states. New summary data for 1991 show that California remains the largest producer, with nearly 11 percent of the nation's total. The next four largest producers are Indiana, with 7.7 percent of U.S. output, Pennsylvania with 7.4 percent, Ohio with 6.7 percent, and Georgia with 6.2 percent. Rounding

Large Meat Supplies Dampen Broiler Returns

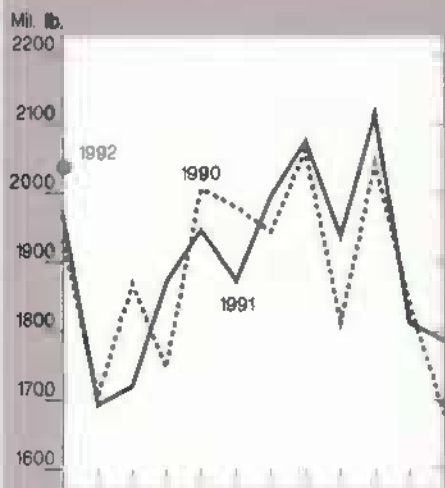
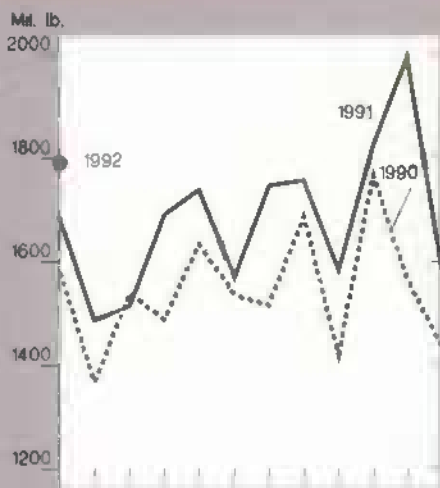


Broiler returns: 12-city broiler price less total cash costs. Meat includes red meat and poultry.

Livestock & Product Output

Commodity Overview

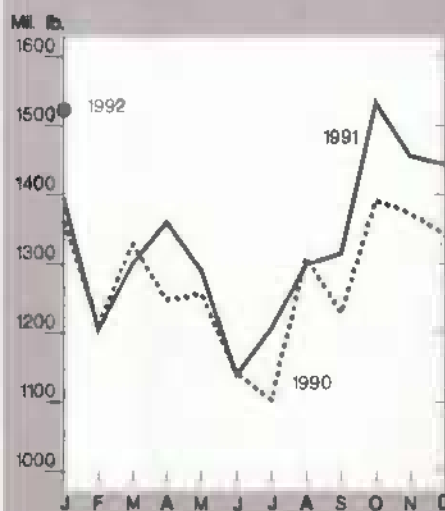
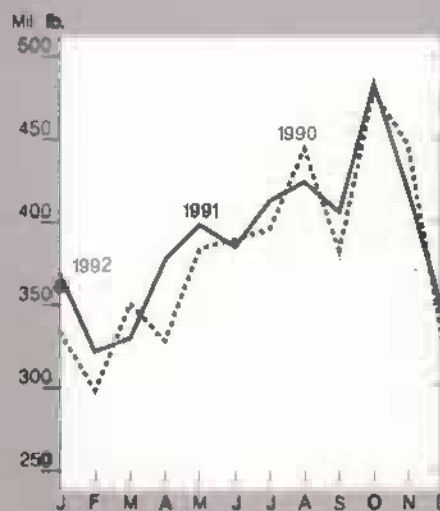
Commercial beef

Broilers¹

Eggs



Commercial pork

Turkeys¹

Milk



¹Federally inspected production, ready-to-cook.

out the top 10 states are Arkansas, Texas, North Carolina, Minnesota, and Florida.

The usual seasonal wholesale price strength associated with Easter buying is spread over two quarters this year, as Easter occurs in late April, 3 weeks later than last year. Second-quarter retail prices are expected at around 89 cents a dozen, compared with 93 cents a year ago. First-quarter retail prices averaged in the low 90's, and well below last year's \$1.05. Unless price strength appears toward the end of the second quarter, average net returns for 1992, although positive, are likely to be the lowest since 1989. The low returns reflect higher feed costs in the first half of

1992 and lower egg prices during the year.

Exports in 1992 are expected to remain strong, but slightly below last year. Modestly lower U.S. prices will help preserve a competitive position in most markets. The level of Export Enhancement Program (EEP) sales will remain important for 1992 exports, however. More than 12 percent of last year's exports of table eggs were EEP sales—twice the percentage of 1990. Almost 75 percent of the EEP sales were to Hong Kong, while the rest were to the United Arab Emirates and Oman.

Including the shell equivalent of egg products, total egg exports in 1991 rose 54 percent from the previous year, and were the highest since 1982. Japan was the leading market, taking more than 12 percent of U.S. egg exports, mostly egg products.

Broiler Producers Slowing Growth

Second-quarter broiler production will likely increase to around 5.2 billion pounds, lagging the robust 7-percent growth of a year earlier. A general indicator of growth during the second quarter is the 4-percent-larger broiler-type

Commodity Overview

hatching egg flock on February 1, 1992. Smaller increases are expected in the hatchery supply flock through July 1992, reflecting producers' caution during the second half.

Broiler producers are prompted to slow expansion in 1992 with last year's net returns down from year-earlier levels. Production is expected to increase 4-5 percent from 1991, compared with last year's 6-percent rise. While first-quarter output rose 6-7 percent from a year ago, February chick placements are pointing to about a 4-percent production increase in April.

Wholesale broiler prices during the first quarter averaged about 50 cents a pound, down 1-2 cents from a year ago. Second-quarter prices will likely hold steady from the first quarter, but average 2-3 cents lower than last year. Slightly weaker retail prices are also expected for whole broilers in 1992, with first-half prices likely in the high 80's.

Increased supplies of poultry and red meats will continue to pressure wholesale broiler prices during 1992. Prospects of a flat economy and lower broiler exports will help pull broiler prices slightly below a year earlier.

Expected year-to-year declines in broiler prices and higher feed costs through the third quarter may bring 1992 net returns to their lowest average in several years. Net returns on a whole-bird basis will probably remain above breakeven for the year, but negative net returns are likely in some months.

Competitive prices for dark meat parts will continue to help U.S. exports in 1992, but broiler exports are expected to be lower than 1991. Prospects look favorable in most markets, but financial uncertainties still surround the outlook for exports to the former Soviet Union. The

expected decline in exports there will contribute to a small reduction in overall exports, from 1.26 billion pounds in 1991 to around 1.2 billion.

Most of this year's growth in U.S. broiler exports will likely be in the Pacific Rim countries, which are enjoying healthy economies and where poultry meat consumption is posting steady increases. About half of U.S. broiler sales are expected to be made to these countries. Among other markets, larger sales are also likely to Mexico, Canada, the Caribbean, and the Middle East. Exports of broilers to the Middle East will be mostly whole birds under EEP.

Turkey Stocks Rebound After Brief Respite

After declining 14 percent from a year earlier by the end of December, turkey stocks rose sharply during January. On February 1, stocks reached 325 million pounds, nearly 8 percent above a year earlier. The large increase was in whole birds—other turkey stocks rose only moderately. A 4-percent increase in January production compared with a year earlier partly contributed to the stock upturn.

The stock increase also indicates that turkey consumption dropped early this year, compared with early 1991. Large supplies of competing meats, especially lower priced pork, were important factors in the consumption slowdown. Another factor probably was the large purchases of bargain-priced turkeys in late 1991. Consumers may have stored a larger quantity of birds in home freezers, slowing purchases early this year.

Production growth in the first quarter is estimated at 3-4 percent, slightly slower than last year. Second-quarter production will be about 2 percent above a year

earlier, considerably less than the over 5-percent growth last year.

Wholesale turkey prices have begun to move up slightly, following a normal seasonal pattern. But prices remain low, and further gains will depend on a pickup in demand, particularly for whole birds during the Easter season. Last year, Eastern region hen prices rose 6 percent in March, prior to Easter. This year, turkey will be competing with larger supplies of lower priced hams, likely resulting in wholesale turkey prices slightly below a year earlier.

A strong export picture is helping to keep prices from drifting lower. Turkey exports have recently been running at 3 percent of production, compared with about 1.5 percent a year ago. In 1991, Mexico purchased about 60 percent of U.S. turkey exports, and the Pacific region took about 20 percent. Turkey sales have benefited from liberalization of Mexico's economic policies, including reduction of trade barriers. Mexico's turkey imports skyrocketed between 1990 and 1991, from 15.7 to 64 million pounds.

Per capita consumption in Mexico is much lower than in the U.S.—0.96 pounds compared with 19 pounds—but there is potential for further growth in the Mexican market, where turkey thigh meat can be used in many ways, including in traditional dishes.

For further information, contact: Richard Stillman, coordinator, Ron Gustafson, cattle; Leland Southard, hogs; Lee Christensen, Agnes Perez, and Larry Witucki, poultry; Jim Miller and Sara Short, dairy. All are at (202) 219-1285. **AO**

Specialty Crops Overview

Higher prices for apples, pears, and tomatoes boosted overall retail prices for fruit and vegetables this winter, although tomato prices are expected to be seasonally lower during the spring. U.S. sugar consumption continued growing in 1991, although at a slower pace than during the previous 2 years. Marketing quotas for tobacco have been announced for the 1992 season, 54 million pounds lower than in 1991 for burley and 14 million pounds higher for flue-cured. [For the latest update on specialty crops, see tables 20-22.]

Fresh Fruit & Vegetable Retail Prices Lower

The Consumer Price Index (CPI) for all fresh fruits remains slightly lower than a year earlier, but orange prices are much lower while apple prices are higher. The February CPI for fresh oranges was down 20 percent from a year earlier, and for fresh apples was up 9 percent. For all fresh fruit, the CPI was 4 percent lower than the year before. Apples, bananas, and oranges are the major items in the fresh fruit CPI.

California fresh orange prices dropped in 1991/92 following unusually high prices in 1990/91 when cold weather damaged the orange crop. Production recovered in 1991/92, and prices this year are closer to usual seasonal levels. Florida shipped a larger volume of fresh oranges earlier this year, helping to hold down fresh prices.

The higher prices for fresh apples are due in part to lower production in the Western states, but primarily to strong export demand. A short 1991 European apple crop combined with greater market access to Pacific Rim countries is boosting U.S. exports. Retail apple prices are expected to continue above a year earlier during the remainder of the spring and

summer with continuing strength in export demand.

For bananas, the CPI was 4 percent higher than 12 months earlier. Banana prices are expected to move seasonally higher during the spring. Weekly shipment volume was running about even with a year earlier as of the middle of February.

Retail prices for pears also are expected higher this spring than a year earlier. Pear production in 1991 was down 6 percent from 1990, and stocks as of the beginning of February were 5 percent below a year earlier.

The second-quarter retail price index for all fresh vegetables is expected to be down from a year earlier because of lower potato, lettuce, and tomato prices. Potatoes, lettuce, and tomatoes account for a major share of the overall CPI for fresh vegetables.

Record-large 1991 fall potato production in the Western states has kept retail potato prices low. Western states are a major source of fresh potatoes from storage. Prices are expected to remain below year-earlier levels through the spring as shippers work off record storage stocks.

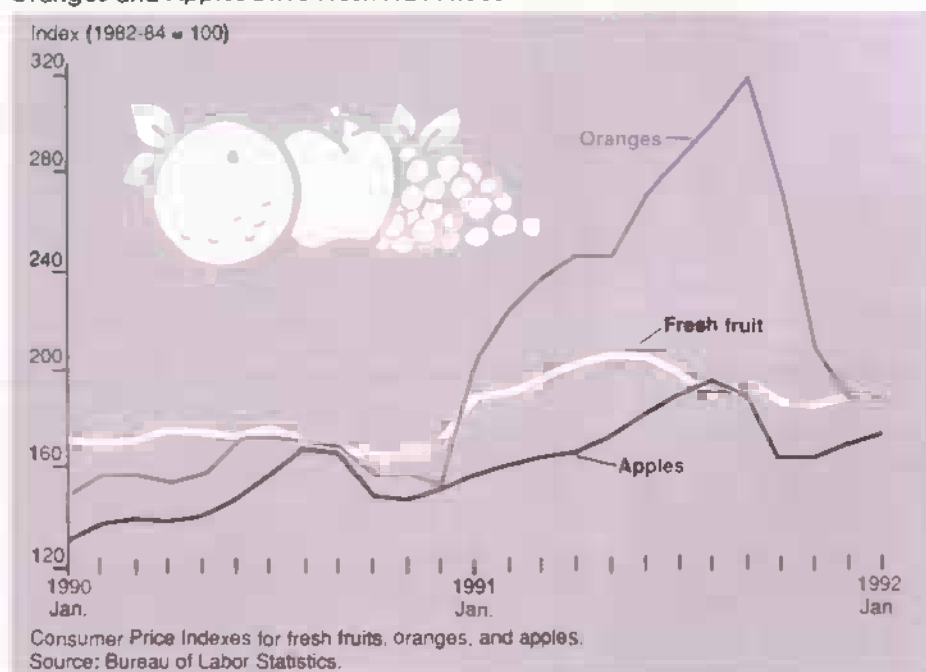
Tomato prices were relatively high during February and March after excess rain in Mexico caused a gap in supplies. Prices are expected to slip during April and May when Florida begins its seasonally high-volume spring shipments.

F.o.b prices for head lettuce have been at the minimum levels needed to cover harvesting and packing costs since December. Cooler weather at the end of 1991 diminished whitefly populations in California and Arizona desert areas, limiting damage during the winter. The expected lower output and higher prices for lettuce, due to the whitefly, did not materialize. Instead, regrowth and replanting increased output and helped lower prices.

Tobacco Program Provisions Set

Announcement of the burley marketing quota and price support level in February completed the provisions for the 1992 flue-cured and burley tobacco program. Acreage allotments and supports for five other kinds of tobacco were announced February 28. The basic quota for burley is 670 million pounds, 8 percent below the year before. The basic quota for flue-cured (announced in December 1991)

Oranges and Apples Drive Fresh Fruit Prices



Commodity Overview

is 892 million pounds, up 14 million from 1991. Support prices for 1992 tobacco will be \$1.649 a pound for burley and \$1.56 for flue-cured, up 6.5 and 3.2 cents from 1991.

Basic quotas for flue-cured and burley tobacco are the sum of: 1) domestic cigarette manufacturers' stated purchase intentions during the 1992/93 marketing year; 2) average exports for the three most recent marketing years; and, 3) an adjustment to maintain loan stocks at the larger of 15 percent of the basic quota, or 100 million pounds of flue-cured and 50 million pounds of burley.

Potential tobacco marketings are determined by the effective quotas, which are the basic quota adjusted upward for underquota marketings (unused quota from the previous year) or downward for overquota marketings (tobacco sales in excess of the quota during the previous season). The 1992 effective quotas will be about 830 million pounds for burley (16 million less than a year earlier) and 898 million for flue-cured (up 7 million).

The decrease in the burley quota is due to reduced purchase intentions by manufacturers, and adjustments to maintain stocks at 15 percent of the previous year's marketing quota. The flue-cured quota rose because manufacturers' purchase intentions increased, the 3-year average of exports increased, and only a small upward adjustment was needed to maintain reserve stocks.

U.S. cigarette consumption declined in 1991 to 510 billion cigarettes, 3 percent less than in 1990. Higher cigarette prices, adverse publicity concerning health hazards of smoking, further restrictions on permissible smoking areas, and declining social acceptance of cigarette smoking all contributed to the decline. Consumers continued to switch to generic and mid-priced brands which can cost up to 50 percent less than full-priced brands.

Sugar Use Continues Up

U.S. sugar consumption continued growing in 1991, although at a slower pace than during the previous 2 years. Estimated consumption in calendar 1991, measured as sugar deliveries for food and beverage use, rose to 8.7 million short tons, raw value, up 0.7 percent from 1990. Based on data for the first three quarters, the largest growth was in the form of sugar used in bakery and cereal products.

Per capita consumption of refined sugar rose to 64.5 pounds, up almost 5 pounds since 1986. The 1986-91 increase follows nearly a decade of decline in per capita use. After peaking at 94.2 pounds in 1977, per capita refined consumption declined to a low of 60 pounds in 1986, as high fructose corn syrup (HFCS) made inroads in the sweetener market. The decline in sugar use halted after 1986 because the opportunities for replacing sugar with HFCS in manufactured food products became more limited after the conversion in the beverage industry was completed.

Since 1986, sugar's share of total consumption of caloric sweeteners has remained constant at about 46 percent, down from 76 percent in 1977. Among other caloric sweeteners, including edible syrups such as maple and cane, honey, and corn sweeteners (HFCS, glucose, and dextrose), HFCS is the leading sweetener. In 1991, HFCS accounted for 35 percent of total caloric sweetener consumption. [Glenn Zepp (202) 219-0883]

For Further information, contact: Boyd Buxton, fruit; Gary Lucier, vegetables; Peter Buzzanell, sweeteners; Doyle Johnson, tree nuts and greenhouse/nursery; David Harvey, aquaculture; Lawrence Glaser, industrial crops. All are at (202) 219-0883. **AO**

Commodity Spotlight



U.S. Meat Export Federation

Global Meat Consumption & Trade

Over the past 10 years, worldwide meat consumption patterns have changed dramatically. Government regulations, changing lifestyles and incomes, and attitudes about the relationship of meat consumption to health are among the factors reshaping worldwide demand.

This article, the first in a series on international trade in meats, canvases overall recent developments in consumption and production in the world's major producing and consuming regions. Future articles will examine the beef, pork, and poultry sectors more closely, detailing how particular trends are generating changes.

Poultry Leads Production Gains

Shifting patterns of world production and consumption have led to a 4-percent increase in meat trade each year since 1985. World meat production has also shown steady growth, increasing an average of 3 percent per year from 1985 to 1991. But growth in both production

and trade is forecast to slow to about 2 percent in 1992.

Poultry led the recent growth in both meat production and trade, increasing at average annual rates of 6 and 8 percent since the mid-1980's. Poultry's rapid gains in production and trade reflect greater feed efficiency, with a shorter time period required for production of poultry compared with other grain-fed animals. In some countries, poultry has become less expensive to consumers than other meats.

Even though poultry has led the recent growth in meat production, its share of world meat production in 1991 still amounted to less than a quarter. Pork dominates with 41 percent of global meat production, followed by beef, with 31 percent.

While production of pork, beef, and poultry has grown, output remains concentrated among a few key countries or regions. Almost half the world's poultry is produced by the U.S. and European Community (EC). The U.S. share is about 30 percent, and the EC's about 18 percent, followed by China, the former USSR, Brazil, and Japan. Some developing countries have increased poultry production dramatically. Between 1985 and 1990, Turkey increased production 150 percent and India 107 percent, and production is forecast to increase further in 1992. But most of these countries remain relatively small producers.

Pork output increased an average of 3 percent per year between 1985 and 1991, and could reach 66 million metric tons in 1992. Over half the world's pork is produced in three countries. China is the largest producer, with about a third of the world's output. The U.S. is second, with about 12 percent, followed by the former USSR with 10 percent. The EC-12 produces slightly more than the U.S. and USSR combined. Other major pork producers are Eastern Europe and the Pacific Rim.

Beef and veal production has grown more slowly, rising less than 1 percent annually between 1985 and 1991. After declining in 1991, production is expected to increase to 49 million tons in 1992.

The U.S., EC, and former Soviet Union account for nearly 60 percent of global beef production. The predominant beef producer is the U.S., with 22 percent of output in 1991. The former USSR ranks second, with about 18 percent, followed closely by the EC. Argentina and Brazil account for approximately 8 and 7 percent.

Per Capita Growth Trails Output Advance

While more people are consuming meat, growth in per capita consumption has not kept pace with increases in output. Global production of meat has increased an average 3 percent per year since 1985, but per capita consumption grew by less than 1 percent per year. Between 1975 and 1991, per capita meat consumption grew 23 percent, due primarily to increased consumption of poultry, up 65 percent.

On a per capita basis, the largest meat consumers are the U.S. (118 kg), Hungary (96 kg), Australia (106 kg), Denmark (99 kg), and Canada (97 kg). The EC countries together consume 83 kg per capita, compared with Eastern Europe at 76 kg, and the former Soviet republics at 67 kg annually.

Traditionally, beef has been the meat of choice for U.S. consumers, but poultry is forecast to achieve first place in 1992, measured on a carcass-weight or ready-to-cook basis. Over the period 1975-91, per capita beef consumption declined 6 percent, as poultry consumption cut into beef demand—both in the U.S. and in other regions of the world.

Poultry consumption per capita has grown more than 60 percent since 1975. Brazil recorded the largest growth, over 200 percent. In the U.S. and the former USSR, per capita consumption was up over 80 and 90 percent.

Pork remains the predominant meat consumed in Europe. In the major reporting countries, per capita pork consumption rose 16 percent from 1975 to 1991, led by advances in China, Taiwan, and Denmark. But most of these gains were offset by declines in East Central Europe

and stagnant demand in most other regions. In many nations of the world, religious practices bar pork consumption.

Rising Income Fuels Meat Demand

Even if meat prices remained constant, consumption patterns would change with trends in incomes and lifestyles, and developments in production, processing, and distribution. Shifts in government policies influencing availability and pricing also affect consumption.

Income is the most significant factor affecting demand for meat. Demand generally will increase with higher income, but consumption tends to level off and may even decline at the highest incomes. Rising incomes also change the types of meat demanded. More expensive meats or cuts of meat, for example, become affordable at higher incomes.

The Middle East and East Asia provide examples of increased meat consumption accompanying economic growth—due to rapid industrialization in the case of East Asia, and rising oil revenues in the Middle East. East Asia experienced a 167-percent increase in per capita meat consumption since the mid-1970's. Per capita consumption in Middle Eastern countries also grew rapidly from the 1970's to the mid-1980's.

Reduced incomes, on the other hand, may lower meat consumption, or bring about a switch to lower priced meats. With the collapse in oil prices in the mid-1980's, meat consumption stagnated in the Middle East, and in Mexico, per capita consumption of total meat declined during the 1980's as real incomes fell. Mexicans reduced their consumption of beef and pork, and shifted to lower priced poultry. The level of red meat consumption in Mexico has recovered somewhat in the 1990's with an increase in consumer purchasing power.

Changing lifestyles also affect consumption and trade patterns. As consumers demand more food away from home, for example, the market for fast foods such as fried chicken and hamburgers increases. In many higher income

Commodity Spotlight

countries, consumer preferences have shifted from large cuts of meat like roasts, toward foods that are simple to prepare, like steaks, chops, and deboned chicken breasts.

Health consciousness about the fat content of foods has increased demand for leaner cuts of meat. Health concerns can also alter trade patterns, as when the EC banned imports of meat produced with growth hormones.

On the supply side, vertical integration in U.S. poultry production resulted in a greater supply of relatively low-cost poultry products. Trade opportunities have increased with technological advances in transportation of highly perishable products like meat. Technology has also increased shelf life, improved product packaging and presentation, and affected preparation—microwave cooking is an example. All these developments in turn influence consumption and trade patterns.

Government policies can affect consumption directly or indirectly. Importing feed to increase domestic meat production is a measure adopted by Central and Eastern Europe, the former Soviet Union, and some Asian countries. In some instances, poultry production is emphasized since the feed conversion of

poultry is more efficient than with cattle or hogs—enabling producers to obtain more meat per unit of feed input. When governments import meat, as in the Middle East, they often look for the least expensive varieties such as poultry or surplus beef from the EC, which uses subsidies to encourage its meat exports.

Meat Trade Small Relative to Output

The volume of meat traded remains a very small share of world output. Excluding trade among EC member countries, only about 9 percent of the beef produced, 3 percent of pork, and 6 percent of poultry is exported. Even accounting for trade among EC members, the percentage traded rises only slightly.

Changes in supply and demand in various countries over the last few years have increased the total quantity traded and changed the mix of meat exported. However, preliminary figures indicate that meat trade will decline about 10 percent in 1992 after peaking in 1991. Meat exports grew 26 percent from 1985 to 1991, led by a 72-percent gain in poultry meat. Beef trade advanced 21 percent, pork 20 percent, and lamb, mutton and goat increased 4 percent.

Japan—relatively new to beef trade and with a rapidly growing taste for beef—is forecast to increase its imports, following the removal of import quotas. As a major supplier to Japan, the U.S. has increased its overall export ranking from sixth to third since 1985.

Large meat-producing countries are often also engaged significantly in trade—both as exporters and importers. This is particularly true of the U.S. and EC. The U.S. is the world's largest beef producer and exporter, as well as a leading beef importer. Likewise, excluding China, the EC is the largest pork-producing region of the world, and also ranks among the top importers and exporters of pork.

On the other hand, countries like Taiwan and Denmark rely on trade to augment or dispose of supplies. Denmark and Taiwan consume only 27 and 75 percent of their production; they must export the rest to balance supplies. The world's largest pork-producing country, China, is also a major pork exporter. The ranking of these traders can change dramatically over time, depending on their domestic supplies.

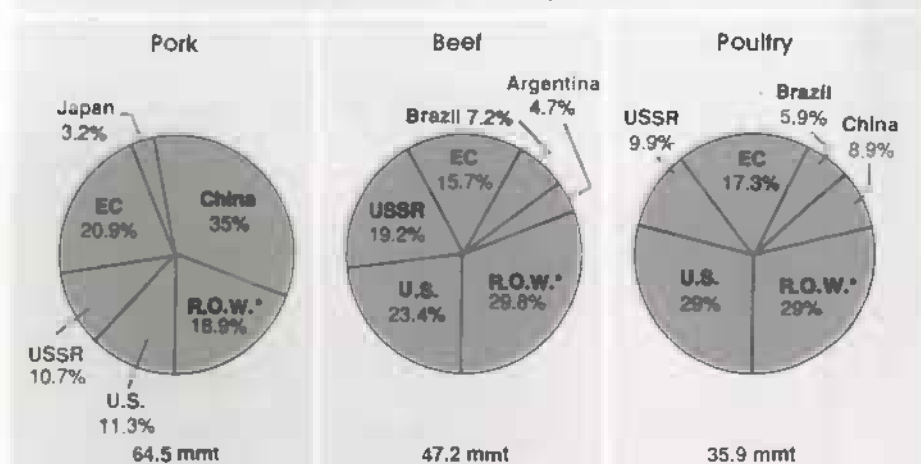
Health & Safety Issues Shape Trade Flows

Meat trade continues to be affected by legitimate concerns about the spread of livestock disease and contamination by chemical residues. The occurrence of foot-and-mouth disease in some countries, for example, precludes fresh meat exports from these countries to areas where the disease is not evident.

Some actions are of a temporary character, such as the Japanese ban on imports of pork with sulfamethazine residues, the removal of Brazil from the U.S. list of acceptable residue testing programs, and Mexico's ban on imports of U.S. hogs believed to be infected with Swine Infertility and Respiratory Syndrome (also known as Mystery Reproductive Syndrome). Each of these bans was overturned after the situation was corrected, either through a certification program or by bringing the exporting countries' standards into line with those of the importing countries.

A Few Nations Consume Most of the World's Meat

Share of world meat consumption, 1990



Million metric tons

*Rest of world.

Source: USDA, FAS.

Commodity Spotlight

However, other health and sanitary restrictions may lack a strong scientific basis. Efforts are underway to harmonize many of the major trading countries' health and sanitary regulations.

In addition to health and safety issues, meat trade flows are impeded by government policies that insulate domestic crop and livestock producers from world market forces. Import restrictions and tariffs are two of the most commonly used border measures for protecting a domestic industry.

Trade barriers are now being addressed in bilateral and multilateral negotiations aimed at reforms. The Uruguay Round of the General Agreement on Tariffs and Trade (GATT) has involved the largest number of participants.

Analyses of several trade liberalization proposals have indicated that as barriers are removed, global meat production would not change significantly. World trade in meats would increase slightly as countries loosened trade barriers, and trade increases by some countries would offset declines by others. Countries currently dominant in international meat markets would continue to exert a major influence in trade following reforms.

Other reform efforts are ongoing at the bilateral or regional level. Among these are U.S.-South Korean negotiations on beef liberalization, and talks on reform of the EC's Common Agricultural Policy and the North American Free Trade Agreement. Although it is too early to explore the specific outcome of each of these negotiations, they are certain to have an impact on international meat trade.

With economic growth expected to be positive over the next decade, the potential exists for expanding world production and trade in meat and meat products. Much will depend on continued advances in tailoring products to meet individual demands as the patterns of global meat consumption change. [Shayle Shagam and Linda Bailey (202) 219-1285] **AO**

World Agriculture & Trade



Chilean Government Trade Bureau

Fresh Fruit Leads Chile's Export Mix

The Chilean fruit sector has expanded dramatically in the past 30 years, and the country has become competitive in international fruit markets. Chile's success is due to a number of factors including shifting consumer preferences, abundant natural resources suitable for fruit production, and government policies that have allowed for marked changes in the agricultural sector.

Chile's emergence as a supplier of fresh fruit to the world market reflects a trend among Latin American exporters toward sales of horticultural products in order to diversify agriculture, provide employment, and generate foreign exchange.

Diversification in agriculture and exports helps provide insurance against debt crises by spreading export earnings over a broader array of commodities. If a country's foreign exchange earnings do not fluctuate widely about a mean or trend, the country can import goods and inputs without resorting to the costly practice of short-term borrowing. One way to overcome high variability of capital earnings is to diversify exports.

In recent years, developing economies of Latin America have encouraged agricultural exporters to diversify through a variety of incentives. These include exemption from export taxes, and tariffs on inputs granted to producers of nontraditional products.

Chile is among the developing economies taking advantage of these trends, pursuing a free market economy. This has allowed for diversification through the expansion of fruit production for export, especially to the U.S. and Western Europe. Chile has successfully diversified its agricultural sector to the extent that it is now a major fruit exporting nation. Many countries view Chile's diversification of agriculture as a model to be followed.

Building a Model Of Success

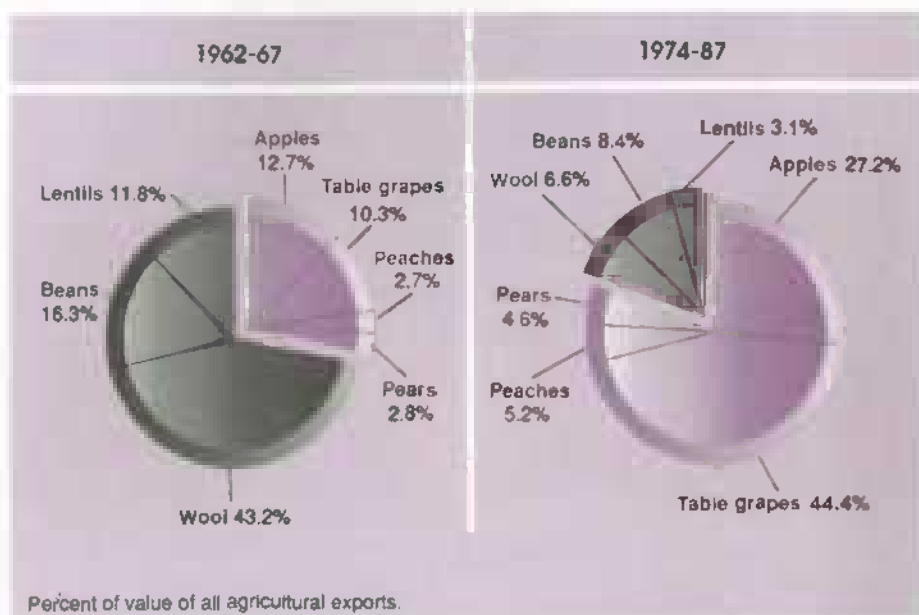
Before 1974, Chile's primary agricultural exports were traditional crops—beans, lentils, and wool. But beginning in the late 1960's and early 1970's, Chilean farmers planted apple orchards and table-grape vineyards, and by 1975 Chile began exporting large quantities of these two nontraditional crops.

In 1974, Chile's fruit exports were a modest 57,000 metric tons, but by 1986 they had grown an extraordinary 1,182 percent to 674,000 tons. Over the same period, fresh fruits grew from 17 to 45 percent of the total value of Chile's agricultural exports.

Chile has surpassed its competitors—South Africa, Australia, New Zealand, and Argentina—to become the leading supplier of fresh fruit to North America and Europe during the Northern Hemisphere's winter months. Chile's major fresh fruit export is table grapes, with over 75 percent shipped to the U.S. Because Chile's grapes are in season during the U.S. winter, table grapes are now available year-round to the U.S. market. A large percentage of Chile's apples, another of its major exports, is shipped to Europe, but some are also shipped to the U.S. Chile is also a primary supplier of fresh pears to the U.S.

World Agriculture & Trade

Fresh Fruit Exports Reshape Chile's Trade Pattern



To avoid a new concentration of exports centered on table grapes and apples, Chile diversified into a wide range of other fruits. Chilean farmers have moved into production of pears, peaches, nectarines, and other stone fruit, as well as kiwi, berries, avocados, asparagus, and onions. Exports of these products are now expanding.

From Traditional to Nontraditional Exports

As exports diversify, aggregate export price and revenue variation are expected to decline. Variation in export prices and, consequently, export revenues, can be observed using a statistical measure known as a coefficient of variation (CV), which indicates levels of price instability in exports from developed and developing countries. The CV is defined as the variance over the mean of a data set. The lower the price CV, the lower the variation in export prices.

Over the period 1974-84, the CV's of field crops commonly associated with exports of the more developed countries, such as wheat, rice, soymeal, soybeans, and corn, range from 0.92 for corn to just

over 19 for rice. These are relatively low, and indicate that export prices of these crops do not fluctuate a great deal.

By contrast, the CV's for crops commonly exported by less developed nations, such as coffee, sugar, bananas, beef, cotton, fishmeal, and cocoa, ranged from 10.6 for bananas to 216.8 for cocoa over the same period. The highest CV's were for cocoa, coffee, beef, and sugar—products commonly exported by Latin American countries. Such price variation contributes to large fluctuations in export revenues. The high price instability associated with traditional products has led to efforts to diversify exports.

CV's were also constructed for the prices of Chile's major agricultural exports—the traditional beans, wool, and lentils as well as the nontraditional apples and table grapes. The higher the CV, the greater the variation in export prices, and export revenues. If CV's were the only signals for diversifying, data from 1961 to 1967 indicate that apples and table grapes would lower the variation in revenue earned from agricultural exports.

Revenue variability from agricultural exports is also reflected in an index of con-

centration. If only one agricultural good is exported, the index equals 100. The greater the diversity of exports, the closer the index lies to zero.

From 1962 to 1977, the indexes for total agricultural exports from Chile trended downward, as exports gradually became less concentrated. In 1975 and 1976 the drop was substantial, reflecting a boost in exports of apples and table grapes alongside the traditional agricultural exports.

The index dropped again in 1977, but by 1978 it began to get larger, reflecting an increasing concentration in apple and table grape exports from Chile. By 1987, the final year of the data set, the concentration index was at 16.3, one of the highest levels in the entire time period. (The highest level of concentration was observed in 1985.) After 1985, Chilean exporters began diversifying a second time into other fruit crops such as pears, peaches, and nectarines. Although the index was still high in 1987, it was lower than the peak of 1985.

The value shares of Chile's major agricultural exports in the 1962-67 and 1974-87 periods also show the trend toward diversification into nontraditional crops. In the first period, apples held 12.7 and grapes 10.3 percent of the total value of agricultural exports. In the 1974-87 time period, apples accounted for 27.2 and grapes 44.3 percent. Export shares of pears and peaches approximately doubled between 1962-67 and 1974-87. By contrast, export shares of lentils, beans, and wool declined.

Export data for 1968-73 indicate that as the share of Chile's exports of apples and table grapes increased, their CV's also rose considerably. By the 1974-87 period, exports of table grapes and apples had expanded to a value of 5.7 and 3.5 times greater than traditional bean exports, and the CV's of their export prices grew remarkably, to 67.99 and 12.03. The increased price variability and concentration suggest the need for a second round of diversification of agricultural exports beyond apples and table grapes.

Export Prices: Relative Coefficients of Variation

The coefficient of variation measures the level of instability of prices of Chile's major agricultural exports. The CV for a commodity rises as the price varies from a particular average. The lower the CV, the greater the price stability of the commodity.

1962 to 1967:

Beans	1.36
Wool	19.54
Lentils	5.50
Apples	0.19
Table grapes	0.86

1968 to 1973:

Beans	55.48
Wool	NA
Lentils	27.62
Apples	9.82
Table grapes	4.45

1974 to 1987:

Beans	33.00
Wool	44.28
Lentils	27.71
Apples	12.03
Table grapes	67.99

Prices are represented by Chile's export unit values.

NA = Not available.

Data sources: FAO Trade Yearbook and UN trade data.

Looking Ahead

The fresh fruit sector has led the way in showing farmers and investors how to benefit from Chile's market- and export-oriented agriculture. Chilean fruit production for 1992 is forecast slightly above 1991's record levels. But extreme weather conditions during the deciduous fruit growing season negatively affected export availability of some fruits. Weather-damaged fruit is not exported, so although production of some fruits is up, exports may remain at 1991 levels.

As a result, domestic consumption and processing are expected to increase because of a larger supply of lower quality fruit—the main source of domestic supplies.

Meanwhile, the U.S. remains the largest single market for Chile's fruit exports. However, increasing demand from the EC and Central and East European countries combined may eventually surpass exports to the U.S., spurring further growth in Chile's exports.

Diversification has reduced the price variation of Chile's major agricultural exports, as indicated by a moving coefficient of variation of two different price indexes. The traditional export price index consists of a weighted average of the three traditional export crops. The total export price index represents the weighted average of seven crops, including three traditional and four nontraditional.

The variation of the price index faced by Chilean exports is lower (in all reported periods but two) when all seven crops are included than when only the three traditional crops are grown. The evidence indicates that by diversifying, Chilean exporters have been able to significantly reduce the variability of the weighted average of agricultural export revenues they receive.

Other sectors in Chilean agriculture now appear poised to follow the example set by the fruit sector. Freshwater fish, forestry, and vegetable sectors are all expected to show rapid growth in the near term and continue the trend in export diversification. *[Amy Sparks (202) 219-0885 and Carlos Arnade (202) 219-0705] AO*

Poland's Sugar Industry: Barometer of Change

The profound changes taking place in former centrally planned economies have significant implications for several agricultural commodities traded in the world markets. The sugar sector can serve as a barometer of the direction of agricultural policy in the evolving market economies. The countries in Central and Eastern Europe and the former Soviet republics together produce between 13 and 15 million metric tons of sugar, raw value, or about 12-14 percent of the world's annual sugar output. These countries consume over 18 million tons of sugar annually, on average.

Sugar price intervention has a long history and tradition worldwide. Since sugar is often a key commodity politically, many countries strive to be self-sufficient in its production. The centrally planned economies were no exception to the trends in most other countries, and a look at Poland's sugar regime illustrates the transition underway from the situation that has prevailed in most centrally planned economies.

Poland exemplifies both the problems and prospects for sugar regimes in Central and East European countries (CEE's) and the republics of the former Soviet Union. Until the early 1980's, the retail price of sugar had been fixed at 10.5 zlotys per kilogram. Through the 1980's, the retail price steadily rose, and by 1988 the fixed price was 165 zlotys. Sugar price controls were lifted on August 1, 1989, and by 1990 the average price stood at 5,000 zlotys per kilogram.

Around this time, Poland's economy was undergoing radical change. Beginning January 1, 1990, Poland embarked on a shock therapy path toward a market economy. Prices were liberalized and sub-

World Agriculture & Trade

sequently skyrocketed, and the exchange rate was allowed to float. The resulting fall in real income in Poland led to declining consumption of most commodities, including sugar. The exchange rate also rose: at the exchange rate of about 10,000 zlotys per dollar in late 1990, for example, a kilogram of sugar cost 50 cents retail (23 cents a pound).

Reforming an Antiquated Agriculture

Poland is the largest sugar producer in Central and Eastern Europe, its roughly 1.5 to 2 million metric tons of sugar a year comparable to the output of Italy. Poland has between 350,000 and 400,000 sugarbeet farmers. (The U.S. total is less than 10,000.) The average size of all farms is about 7 hectares (17 acres), and average sugarbeet area is about 1 hectare (2.5 acres).

The typical farm still uses horses for field work and hand labor for part of the beet harvest. Most farms in Poland are privately held, so that the task of privatizing farms is not as burdensome as in some of the other East European countries. Farms in Poland typically comprise several small parcels of land spread around a small village, and travel between parcels increases field costs.

Most of Poland's 78 sugarbeet factories were built before World War II and are small and inefficient; sugar recovery losses are about twice as high as in neighboring countries of Western Europe. By way of contrast, the U.S. has about half as many factories as Poland and produces more than twice as much sugar.

No minimum price is in effect for sugarbeets. Some factories are having difficulty persuading farmers to grow beets, and organizations of beet farmers have protested against low prices. In some regions, factories now have to compete for beets, with the result that beets are often transported much further than necessary and some factories are operating below capacity.

Perhaps the biggest problem facing Polish agriculture is the large change re-

quired by farmers to adjust to a market mentality. In the past, farmers were accustomed to producing a quantity specified by the state, at any cost. Since pricing was based partly on the cost of production, farmers would be assured of returns adequate to cover costs. Quality did not matter—only quantity.

Risk has also increased. It is now possible, for example, that a factory accepting delivery of sugarbeets could go bankrupt. If this occurred, not only might a sugarbeet producer not be compensated, but the farmer would have to switch to other crops unless other factories were close enough.

Individual sugar factories, which had previously been organized into 11 "groups," have been made basically self-governing. The practice of forcing factories to purchase and refine raw sugar imported from Cuba has ended. The reemergence of "sugar banks," a type of entity that existed before World War II, should provide the factories with credit and some coordination functions.

The sugarbeet factory at Lublin is typical. In 1990, the factory produced 50,000 tons of sugar, receiving beets from about 15,000 farmers. At present there has been no feasible way for the factory to pay farmers on the basis of quality, as well as quantity, so farmers have little incentive to improve sucrose content or apply more efficient management practices. This will change as factory managers attempt to improve efficiency, but they still face large hurdles.

Poland's Sugar Policy Is Still Evolving

Poland's sugar policy is continuing to develop. Plans for full "privatization" of factories are still not complete, but the aim is to distribute ownership shares of factories among managers, employees, farmers, the sugar banks, the government, and the public. A Ministry of Transformation is responsible for these arrangements. Some of the factories in the worst shape will have to be liquidated.

In 1990 an Agricultural Marketing Agency was set up, which has provided some intervention price support. Neither the agency nor any other branch of the Polish government has publicly stated a definitive sugar policy. When Poland's 1990/91 sugar crop was unusually large while consumption was falling, the agency provided export subsidies for about 500,000 tons of sugar. But the industry apparently cannot count on similar subsidies in the future, as funds are scarce.

Poland's only border measure for sugar is a tariff on imports, recently raised to 40 percent. Suppose that white sugar is available for about 12 cents a pound, f.o.b. London (approximately the current price), and transportation costs to Poland are 2 cents a pound. The upper limit on the Polish wholesale price would be 40 percent above that sum—about 20 cents a pound. If the tariff remains the only border measure (an uncertainty in a rapidly changing situation), then the current sugar price in Poland (23 cents a pound, retail) is perhaps already being driven to some extent by the world market.

The direction of Poland's sugar policy will depend largely on the new government, just now in place following the elections in late October. Dozens of parties won substantial votes, and the Communist Party finished second to a reformist party. The new government will face a crush of demands from all sides, not the least from sugar processors and beet farmers who will press for a "sugar policy."

Hard Decisions Face New Policymakers

This portrait of the sugar sector in Poland sets the stage for an examination of the hard decisions on agricultural policy which all of these countries will face in the coming months and years.

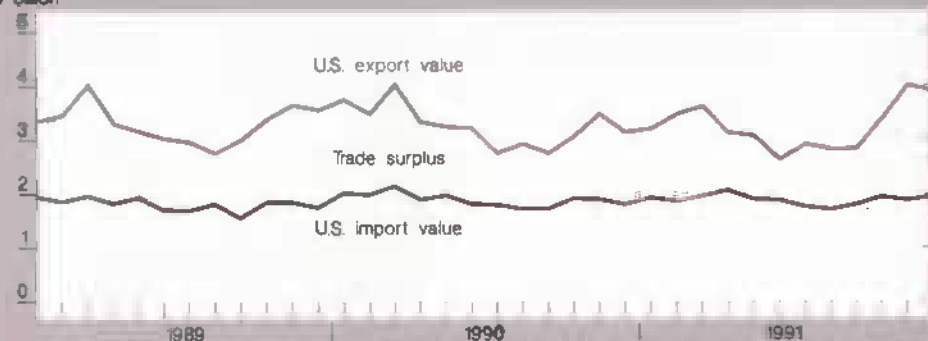
Each country's basic political and economic policies lie somewhere along a spectrum between public and private control of resources. Likewise, the degree of price intervention can range between high and low.

U.S. Trade Indicators

World Agriculture & Trade

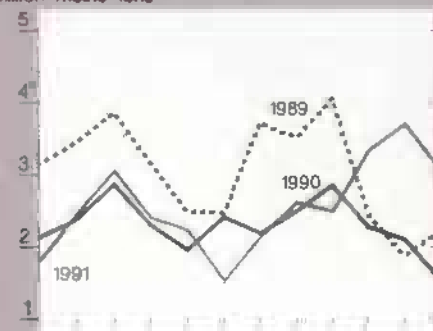
U.S. agricultural trade balance

\$ billion



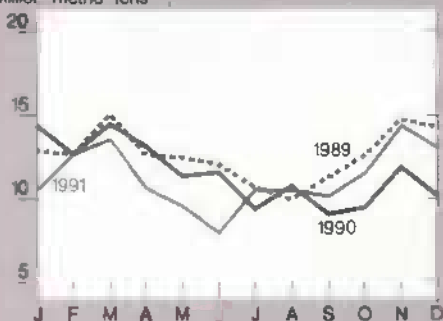
U.S. wheat exports

Million metric tons



Export volume

Million metric tons



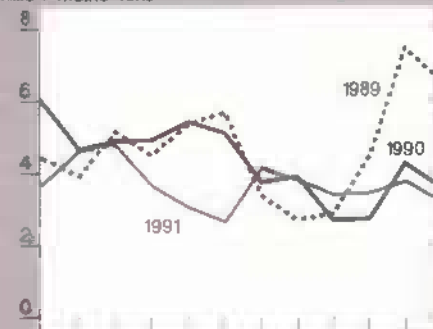
Index of export prices

1985 = 100



U.S. corn exports

Million metric tons



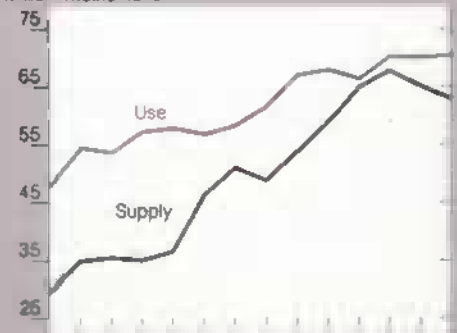
Foreign supply & use of coarse grains

Million metric tons



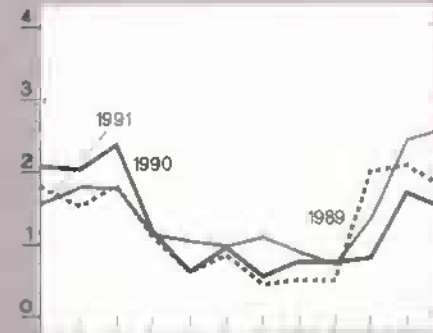
Foreign supply & use of soybeans

Million metric tons

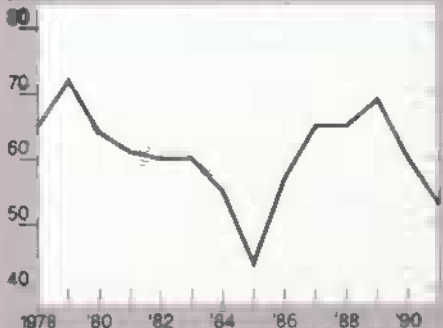


U.S. soybean exports

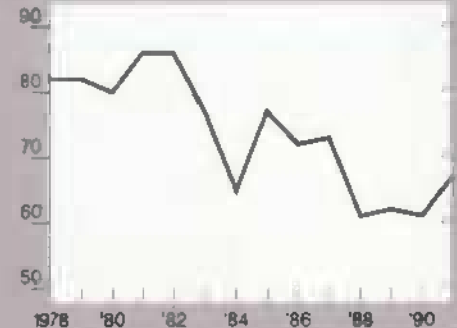
Million metric tons

U.S. share of world coarse grains exports^{1,2}

Percent

U.S. share of world soybean exports^{1,2}

Percent

U.S. fruit, nut & vegetable exports³

Thousand metric tons

¹Excluding intra-EC trade. ²October-September years. ³Includes fruit juices.

World Agriculture & Trade

The countries that have announced intentions to become market economies are starting with public control of resources and a high degree of price intervention (which often meant very low controlled sugar prices). These countries have indicated plans to "restructure" and move toward a system of private control of resources. With some exceptions, and with a great deal of uncertainty in the case of the former USSR, they seem to be making progress in that direction.

Moves to replace government intervention with market prices are far less certain. Free market economics is often more difficult to implement in agriculture than in other sectors of the economy, and perhaps even more difficult with sugar than with other agricultural commodities. Agriculture is often considered a special sector—perceptions of food security often unleash powerful political forces. And, with unemployment a key issue, price intervention could mean the difference between success and failure for many sugar factories and farms in the next few years.

There is a distinct possibility that the former centrally planned economies may opt for sugar regimes that move them into the same policy orbit as most countries of the world.

Will Reforms Lead to Higher Output?

The potential for improvements in sugar production efficiencies is considerable. Average sugarbeet yield in 1988-90 was 26.7 tons per hectare in the former USSR, 35.4 tons per hectare in Poland, and 51.6 tons per hectare in Denmark (close to the average for the EC). These differences cannot be explained solely by soils and climate. During the same period, the recovery rate of sugar per ton of sugarbeets was 10.4 percent in the former USSR, 13 percent in Poland, and 16.1 percent in Denmark.

Suppose that countries such as Poland and the republics could, over a period of 5-10 years, close by half the gap between their yield per hectare and Denmark's. With acreage unchanged, Poland's sugar output would increase from 1.96 to 2.7 million tons, a 38-percent increase. Sugar production in the former USSR would rise from 9.3 to 17.3 million tons, a staggering 87-percent increase.

Can yields and recovery rates improve without massive capital investments? Quite possibly. Restructuring of the economy will put pressure on all resource owners to improve efficiency or fail. Most Polish farms, for example, are small and communication is poor. Better communications alone would help spread improved practices and technologies.

Within a very few years, improved management practices will likely be forced on farmers by factories struggling to reduce costs. Western technology is already moving into Eastern Europe at a rapid pace. And over time, the average farm size will no doubt grow, bringing increased efficiency and economies of scale.

In such a scenario, only modest amounts of capital investment would be required to make the first strides toward substantial improvements in both field and factory and increase sugar output. At the same time, efficiency gains will continue in the West, presenting a moving target for others trying to catch up. [Ron Lord (202) 219-0888] **AO**

Upcoming Reports from USDA's Economic Research Service

The following are April release dates for summaries of the ERS reports listed. Summaries are issued at 3 p.m. Eastern time.

April

- 10 World Agricultural Supply & Demand
- 14 Vegetables & Specialties
- 20 Agricultural Outlook
- 21 Dairy
- Agricultural Resources
- 22 Rice
- 23 Oil Crops

Farm Finance



Farm Income To Dip Below Last Year

Major factors influencing 1992 farm income forecasts are expectations of a 3-percent drop in livestock receipts offsetting a 2-percent increase in crop receipts, and an increase in production expenses of 3 percent. Preplanting forecasts show net cash income for 1992 of \$49 to \$55 billion, down 6-8 percent from the \$57 billion forecast for 1991. The planting intentions report, due at the end of March, will give a better indication of likely 1992 income.

Net farm income (which includes non-cash components such as the value of home consumption of farm products, income and expenses related to the operator dwelling, and depreciation) is currently forecast at \$37 to \$43 billion, down 3-5 percent from 1991.

Lower Receipts for Meat Sector

Total livestock receipts for 1992 are forecast down 3 percent, at \$81 to \$85 billion, the lowest level in 4 years. Receipts

for hogs, cattle, and calves are expected to drop to 1988-89 levels.

Hog prices in 1992 are forecast to fall 18 to 20 percent. The likely increase in 1992 pork production will be unable to offset these lower prices, leaving 1992 cash receipts for hogs at \$8 to \$10 billion. Falling prices are also affecting cattle and calf receipts. Slightly higher 1992 production will be offset by a drop in prices of 4 to 9 percent, leaving beef receipts down 3 percent.

Poultry and egg receipts are also expected to fall in 1992, but by smaller amounts than red meats. Broiler receipts are forecast down less than 1 percent, following last year's 2-percent increase. Dairy receipts alone among livestock components are forecast to recover from 1991's low receipts, with both production and prices up slightly.

Field Crop Receipts Rebounding

Both food and feed grain receipts are forecast higher in 1992, with wheat and feed grains at the highest level in 6 years. The wheat subsector is expected to show

the greatest advance, due to tightening U.S. stocks.

The wheat acreage reduction program (ARP) for the 1992 crop has been lowered from 15 to 5 percent. While winter wheat plantings for the 1992 crop were down from a year earlier, spring wheat plantings are expected up. Combined with a rebound in yields, larger production is expected. But even with a wheat production recovery, 1992 calendar-year prices are expected to average above last year. If these forecasts hold for the year, wheat receipts may increase over 30 percent, averaging \$7 to \$8 billion. Rice receipts are forecast up 10 to 15 percent if production rebounds to 1988 levels as expected.

Feed grains are also showing improvement over last year. Corn and sorghum calendar-year prices are forecast up, pushing feed grain cash receipts to between \$19 and \$21 billion, up 4 percent over 1991.

Receipts for other major field crops are expected to decline somewhat. After improving for 2 years, soybean receipts may fall 4 percent, and higher world cotton production is depressing U.S. prices.

Fruit Output Recovers, Prices Remain Strong

The all-fruit price index jumped sharply after the December 1991 freeze in California. Since the level of oranges on the market was already low at the time, prices were highly sensitive to supply shocks. Fruit and nut cash receipts are forecast up 8 percent in 1992, due in large part to strong apple prices, and increased production of apples, peaches, oranges, almonds, and pecans. This should lead to cash receipts in the range of \$11 to \$12 billion.

Direct government payments to farmers and ranchers have fallen each year since 1987's high of \$16.7 billion. But payments could rise 6 to 8 percent in 1992. Although deficiency and diversion payments are forecast down for food and feed grains, conservation and disaster payments are both expected to rise. Conservation payments are forecast up nearly \$400 million, and Secretary of Agriculture Madigan approved \$995 million in disaster assistance for 1990 and 1991 crop losses.

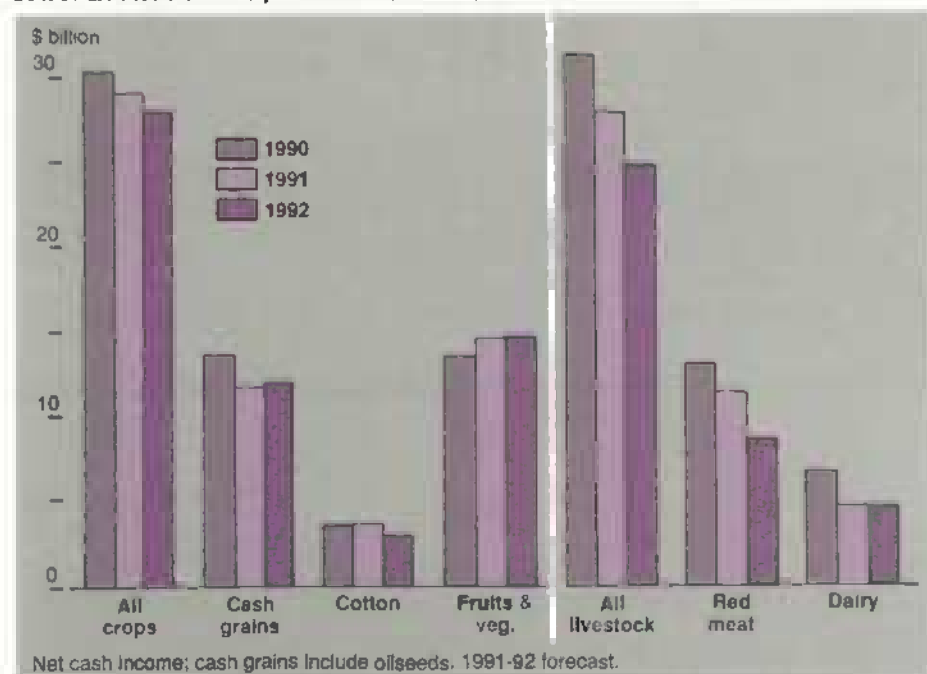
Cash production expenses are forecast up 3 percent this year, to an average of \$125 to \$132 billion. Most expense components are forecast to climb an average of 2 to 5 percent, but feeder livestock and interest charges are expected to fall 4 percent. The greatest increase could come from energy, forecast up 10 percent.

Higher expenses stem mainly from increased demand. Acreage is likely to rise for food and feed grains, which will in turn increase the use of seed, fertilizers, and fuels in field operations. On the livestock side, production is forecast up, increasing the demand for feed, electricity, and machine and building operation.

Incomes Falling In All Regions...

Net cash incomes are forecast to fall in all five U.S. production regions, despite increased cash receipts in the Northeast and West. In these two regions, strong fruit and dairy receipts are causing total

Lower Livestock Receipts Pull Down Net Cash Income



Farm Finance

receipts to rise, but not enough to offset overall expense increases.

The largest percentage decline in net cash income is expected in the South, at 10 percent, where any weakening in cotton prices would have a major impact. The smallest decline is forecast in the West (Mountain and Pacific). A strong fruit sector in California and Washington, and strong wheat in the Northwest and northern Mountain states are helping to counteract lower cotton and livestock receipts and increases in cash expenses.

... But Cash Grain Farms To Improve

With calendar 1992 wheat and feed grain prices likely higher, farmers and ranchers specializing in these commodities can expect their net cash incomes to improve this year. But weak cattle and hog prices will adversely affect red meat producers' incomes.

Net cash incomes on cash grain farms (those with at least 50 percent of the value of production coming from grains and oilseeds) are forecast to rise 4 to 6 percent in 1992. Wheat and corn, the two largest crops in terms of acreage, account for most of the expansion. Lower soybean receipts will be offset by higher returns for wheat and feed grains.

Crop receipts account for nearly 90 percent of the forecast \$35 to \$40 billion in total receipts on cash grain farms. Crop receipts are forecast up over 5 percent, more than offsetting the nearly 7-percent drop in livestock receipts. Increased expenses are expected to be fully covered by the rising receipts.

Fruit and vegetable farms are forecast to see net incomes 1 percent higher in 1992, attributable entirely to rising prices and recovery in production from the 1991-92 winter freeze. Cotton, tobacco, and nursery/greenhouse operations may experience falling incomes, as steady to falling prices compound rising expenses.

Livestock farms are continuing to feel the effects of lower prices over the past 2 or 3 years. Net cash incomes for red meat operations are forecast down nearly 25 percent in 1992 following a 12-percent drop last year. Cattle and calves make up over two-thirds of the receipts on these operations, with hogs, corn, and soybeans accounting for most of the rest. While expenses are forecast to increase less than for crop farms, the 4- to 9-percent fall in beef prices and the 18- to 20-percent fall in hog prices will drive incomes down.

Net cash incomes for dairy farms are essentially steady. While average U.S. 1992 milk prices are forecast up 2-4 percent and milk production could increase slightly, this is not enough to cover the 3-5-percent forecast increase in expenses.

What To Watch In Coming Months

A number of developments bear watching over the next few months. The planting intentions report, released as *AO* went to press, will give the first indication of how much grain, oilseeds, and cotton can be expected. Signups for government program participation will also be available soon.

The farm income forecasting model currently includes preliminary estimates of cash receipts for the first two quarters of 1991. These are the base from which 1992 forecasts are made. Later this month, third-quarter 1991 receipts will be incorporated which can further alter 1992 forecasts. Midway through 1992, the 1991 accounts will be finalized, and provide a new base year for forecasting the 1992 financial accounts.

[Bob McElroy (202) 219-0800] **AG**

Food & Marketing



1992 Food Price Update

The Consumer Price Index (CPI) for food will increase moderately in 1992—in the range of 2 to 4 percent. Prices for some foods this year will actually decline from 1991 levels, while others are expected to rise only slightly. Slow recovery from the recession along with increased supplies of several foods will be the major factors influencing food price changes in 1992.

The economy is slowly emerging from the recession, with no appreciable growth expected until the second half of 1992. In the meantime, inflation and personal income growth will remain low. Both inflation and changes in demand influence food prices at the retail level. Inflation raises the cost of processing and distributing food, while stagnating or declining personal income dampens consumer demand.

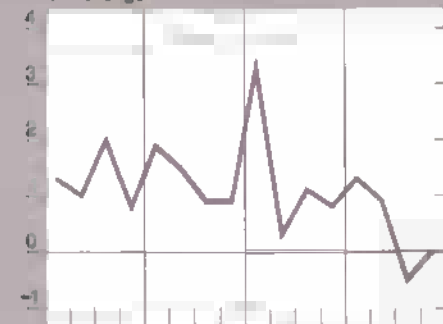
Costs for processing and distributing food, such as labor, packaging, transportation, and energy, account for about 73 percent of consumers' food dollar. The farmer's share is 27 percent. Since processing and distribution costs occur beyond the farm gate, changes in the general economy, particularly inflation,

Food & Marketing Indicators

Food & Marketing

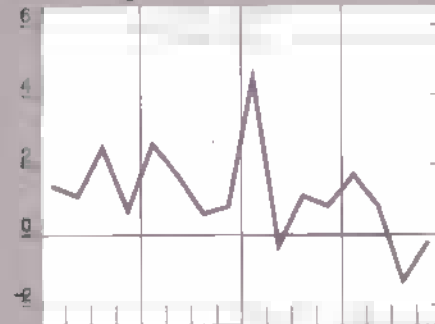
CPI: Total food^o

Percent change



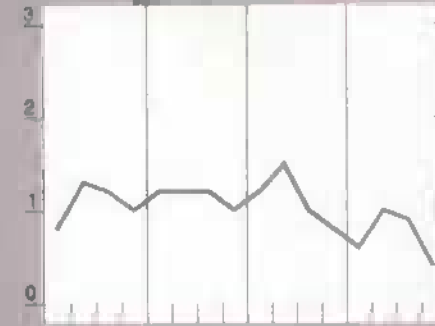
CPI: Food at home^o

Percent change



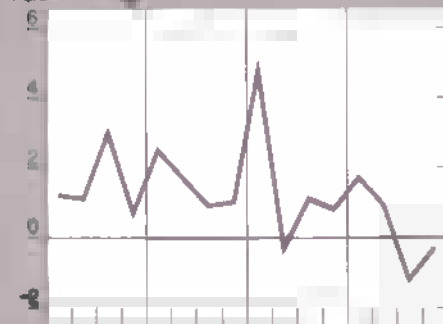
CPI: Food away from home^o

Percent change



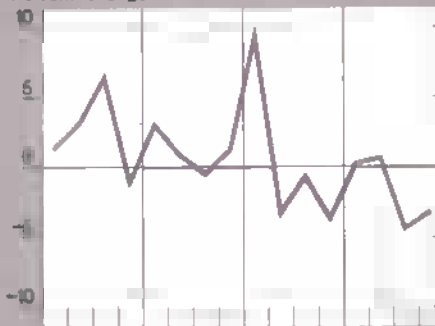
Retail cost of food¹

Percent change



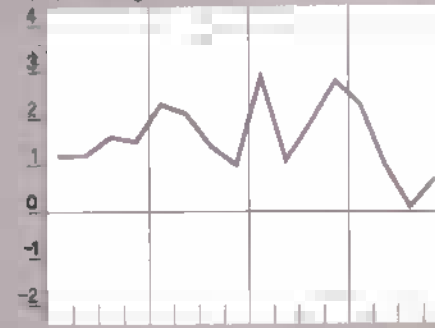
Farm value of food¹

Percent change



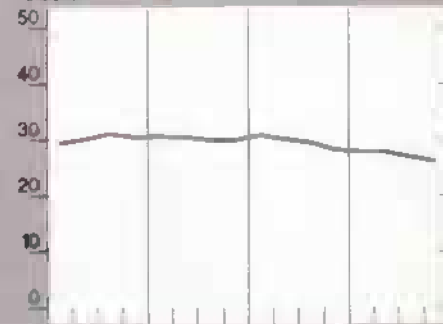
Farm-retail spread¹

Percent change



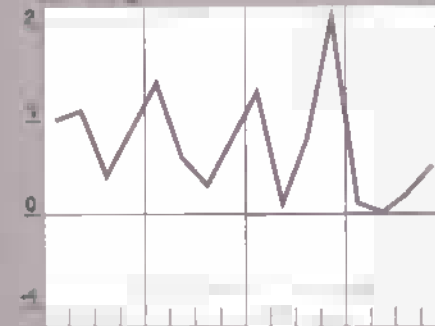
Farm share of retail cost¹

Percent



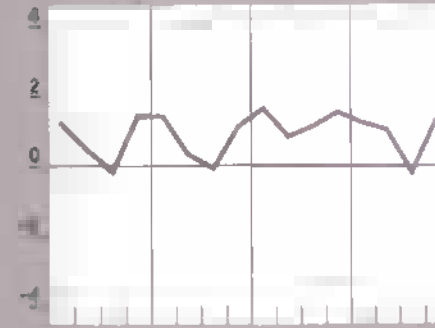
Food marketing cost index²

Percent change



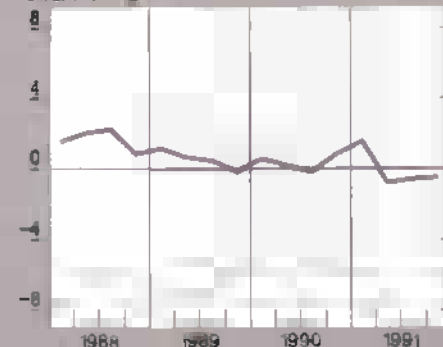
Index of hourly earnings^{3,4}

Percent change



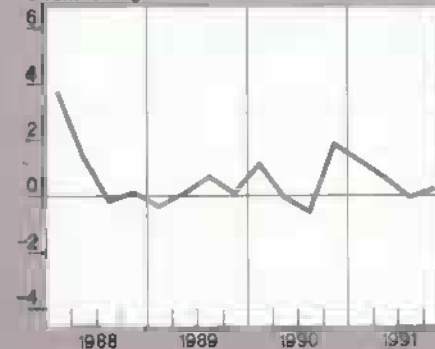
Index of packaging prices⁴

Percent change



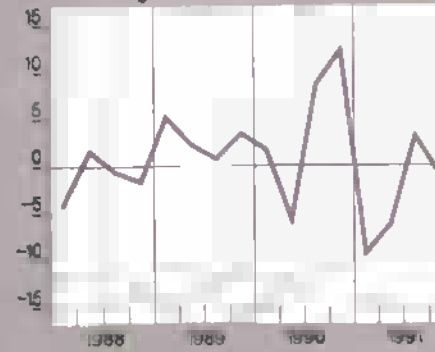
Index of rail freight rates⁴

Percent change



Index of energy rates⁴

Percent change



^oCPI unadjusted. ¹Index based on market basket of farm foods. ²Index of changes in labor, packaging, transportation, energy, and other marketing costs.

³In food retailing, wholesaling, and processing. ⁴Component of food marketing cost index.

All series expressed as percentage change from preceding quarter, except for "Farm share of retail cost" chart.

Food & Marketing

Meat Prices Are Likely To Fall, While Other Prices Rise Marginally

	1989	1990	1991	Forecast 1992
<i>Percent change</i>				
Consumer Price Index				
All food	5.8	5.8	2.9	2 to 4
Food away from home	4.6	4.7	3.4	3 to 5
Food at home	6.5	6.5	2.6	0 to 3
Meat, poultry, and fish	5.0	7.3	2.3	-2 to -4
Meats	4.0	10.1	3.1	-3 to -5
Beef and veal	6.4	8.0	2.8	-1 to -3
Pork	0.6	14.7	3.3	-6 to -9
Other meats	2.8	9.3	3.7	-1 to -3
Poultry	9.9	-0.2	-0.8	-1 to -3
Fish and seafood	4.5	2.2	1.1	1 to 3
Eggs	26.6	4.7	-2.3	-4 to -7
Dairy products	6.6	9.4	-1.1	1 to 3
Fats and oils	7.2	4.2	4.3	1 to 3
Fruits and vegetables	8.5	8.0	4.6	0 to 3
Fresh fruits	6.6	12.1	13.5	0 to 3
Fresh vegetables	10.7	5.6	2.2	1 to 3
Processed fruits and vegetables	6.3	6.2	-1.9	1 to 3
Processed fruits	3.2	8.7	-3.7	1 to 3
Processed vegetables	10.7	2.7	0.8	1 to 3
Sugar and sweets	4.7	4.4	3.7	2 to 4
Cereals and bakery products	8.4	5.7	4.1	4 to 6
Nonalcoholic beverages	3.5	2.0	0.5	0 to 2
Other prepared foods	6.4	4.5	4.5	3 to 5

Source of historical data: Bureau of Labor Statistics. Forecasts by Economic Research Service, USDA.

can affect these costs significantly. A sluggish economy, for example, holds down overall inflation, including retail food prices.

The monthly change in the January 1992 food CPI was only 0.4 percent, the lowest January increase since 1976. The January rise in the food CPI is normally 1 percent or more—sharper than other 1-month changes because it generally reflects first-of-the-year upward price adjustments by food processors to cover their increased input costs. The unusually small change this year indicates that the recession has dampened those increases.

Real disposable personal income is expected to increase 1 percent in 1992, mostly in the last half of the year, after declining 1 percent last year. Despite the slight increase projected, real disposable income will remain below prerecession levels. As a result, consumer budgets will remain tight and consumer demand for higher value foods in particular is not expected to grow much, so price increases will remain limited.

Increased supplies of beef, pork, and poultry this year will cause retail meat prices to decline. Beef production will gain only 2 percent, but pork production is expected to be up 7 percent, and poultry production up 4 percent. With the added production, per capita consumption of red meat and poultry is expected to reach a record 221 pounds in 1992.

The long-awaited expansion in meat production comes at a time when consumers' budgets are constrained by slow income growth, so meat prices will likely decline to clear the market. The CPI for meat is expected to decline 3-5 percent from the 1991 average, and poultry 2-4 percent. These price declines will have a significant dampening effect on the CPI for all food.

For most remaining food categories, the CPI will show modest increases of 1-3 percent. These price advances will come primarily from rising processing and distribution costs.

The most recent outlook for U.S. wheat, for example, calls for sharply reduced supplies, higher exports, and tight stocks.


Tight wheat supplies, decreased winter wheat acreage, and prospects of larger wheat exports in 1992 have caused farm prices of wheat to rise sharply in recent months—59 percent from July 1991 to February 1992. Higher wheat prices as well as slightly higher processing and distribution costs will cause the index for cereals and bakery products to rise more than other categories—by 4-6 percent.

But how will U.S. consumers be affected? If farm wheat prices double, for example, how much would the price of a loaf of bread change?

Price Components— A Loaf of Bread

	Before	After
Wheat	\$.05	\$.10
Other farm ingredients	.02	.02
Processing and distribution	.93	.93
Total price	\$1.00	\$1.05

Although the farm share of the consumer's food dollar is about 27 percent, farmers' share of the retail cost of cereal and bakery products is much lower, generally less than 10 percent. Processing and distribution costs account for most of the retail cost of these highly processed products.

The cost of wheat in a loaf of bread in 1990 was 5 percent of the retail price, while other farm ingredients added another 2 percent. The remaining 93 percent came from processing and distribution costs. So, for example, to adjust for a 100-percent increase in the price of wheat, the retail price of a \$1 loaf of bread would have to increase by only 5 percent. [Ralph Parlett (202) 219-0870] 

WORLD SHEEP & WOOL CONGRESS



August 9-16, 1992

Plaza Hotel
Buenos Aires, Argentina

World Sheep Breeders' Council:
Sociedad Rural Argentina

Programs on:

- Marketing
- Feeding
- Health
- Reproduction
- New production technology

Official Languages: Spanish & English

Registration Fee:

*All events included: \$430
Program and limited events: \$330
Accompanying persons: \$280*

Contact: Telephone: 30-5239/34-8140
FAX: 011 (541) 331-2347

Or write: Secretaria tecnica/Secretariat
Organizacion MC s.r.l.
Av. Pte. R. Saenz Pena 720, 6° A
1035 Buenos Aires, Argentina

Special Articles



E. Garey/SUPERSTOCK

U.S.-Mexico Linkages: Labor & Investment

In this third of a five-part series, AO explores the linkages between the U.S. and Mexico in two key areas of agriculture: labor provided by Mexican migrants, and food investment in Mexico by U.S. firms. Migrants from Mexico have historically been an important source of farm labor in the U.S., providing seasonal labor for fruit, tree nuts, and vegetable production.

As labor moves north, Mexico's growing economy and population provide a promising environment where foreign firms can sell and invest. The U.S. food processing industry has responded to this opportunity—exports by U.S. firms and sales by their Mexican affiliates now exceed \$5 billion.

Mexican Workers: A Key Source of U.S. Farm Labor

Migrants from Mexico have historically been an important source of farm labor in the U.S. For decades, Mexicans have migrated to the U.S. to perform seasonal farmwork. The lack of jobs in Mexico and the availability of higher paying jobs across the border are the main reasons for migrating farmworkers. Farm wages in Mexico vary by region, ranging between \$5 and

\$15 a day. In California, the average hourly wage received by a hired worker is about \$6.41.

Some farmworkers return home each year at the end of the work season, but many have remained permanently in the U.S. to do farm work. Of those who have remained, some have become citizens, many are classified as permanent residents, and others are "Special Agricultural Workers" (SAW's) legalized under the Immigration Reform and Control Act of 1986 (IRCA).

A large number of immigrant workers lack legal documentation or obtain jobs with fraudulent documentation. It is virtually impossible to know the number of undocumented workers in the U.S. at any given time, because of their migratory nature and because many workers will not participate in surveys for fear of revealing their legal status.

Several estimates are available from studies conducted in the 1970's, including an estimate from the Immigration and Naturalization Service of 4 to 12 million undocumented residents (including non-farmworkers) in the U.S. in 1975. This number is much higher than other estimates reported around this time, which ranged between 4 and 6 million persons, with Mexicans accounting for about 2 to 4 million. But while there is no agreement on the number of undocumented Mexican workers, they are clearly an important segment of the farm workforce.

Fruit & Vegetable Production Absorbs Foreign Workers

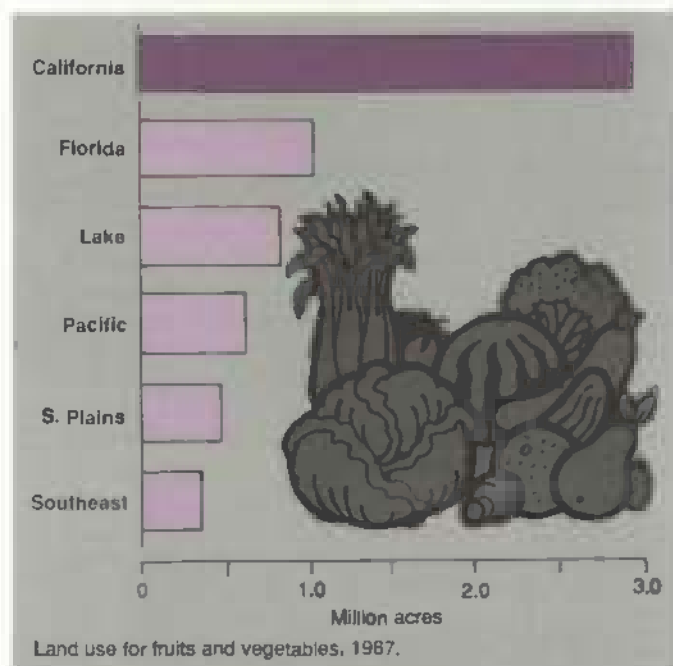
The fruit and vegetable industry requires a large labor force to plant, weed, thin, harvest, and pack the crops. Labor is the single largest input cost for fruit and vegetable production, reaching about 38 percent of total fruit and vegetable production expenses in 1987.

Producers of these labor-intensive crops have traditionally relied on the Hispanic population living in the U.S., and migrants from Mexico, as a major source of labor supply.

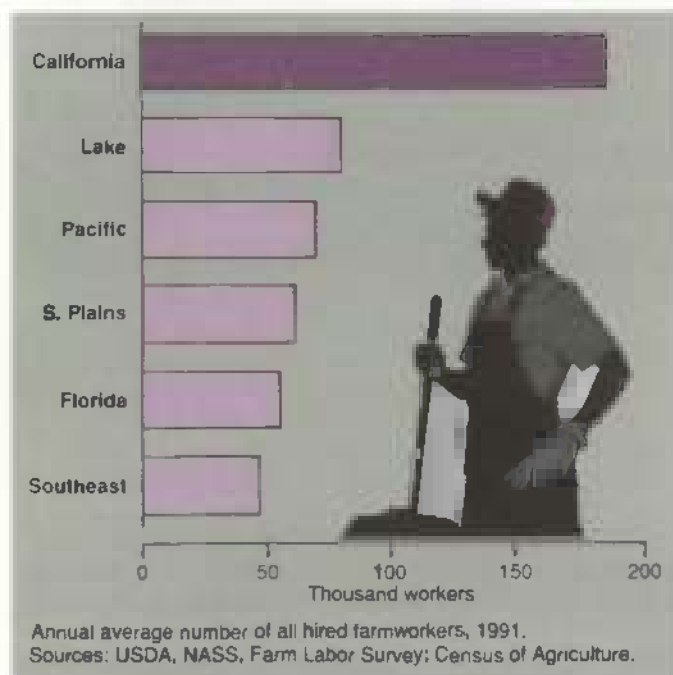
Much of the fruit and vegetable employment is temporary because the labor is needed for only a few weeks during harvest. This uneven labor requirement makes year-round hiring of workers uneconomical and farm employment unattractive to most U.S. workers. Farmworkers who cannot find year-round employment or nonfarm jobs may qualify for unemployment insurance and other public assistance to enhance their annual incomes while they wait for work. Others migrate from area to area, working a string of temporary jobs and returning home when seasonal work ends.

Hired farmworkers are concentrated in states that produce large amounts of fruits and vegetables. California producers grow the most fruits and vegetables, and also hire the most farmworkers. In July, the peak month for farm employment in California, over 200,000 farmworkers were employed in the state in 1991. Florida's climate is more suitable for winter crops, and farm

California Grows the Most Fruits and Vegetables . . .



. . . And Hires the Most Farmworkers



employment peaks in January. Almost 68,000 farmworkers were employed in Florida during January 1991.

Most Foreign Farmworkers Are from Mexico

A survey sponsored by the Department of Labor interviewed over 2,000 randomly selected workers performing Seasonal Agricultural Services (SAS) in the U.S. to gather information on their characteristics and work patterns. SAS crops include most nursery products, cash grains, other field crops, and all fruits, nut, and vegetables. SAS work does not include livestock or livestock products.

Survey results for fiscal year 1990 showed that 62 percent of SAS workers are foreign born, and 92 percent of the foreign born are from Mexico. Fifty-seven percent of all SAS workers are Mexican and 8 percent are Mexican-American. In areas of the country where fruit and vegetable production is concentrated, the proportion of Mexican workers is even greater. A 1989 study of central California found almost 9 of every 10 farmworkers were born in Mexico.

The majority of SAS laborers (75 percent) are employed in the fruit, nut, or vegetable sectors. Almost half (49 percent) are involved in harvesting crops. Nineteen percent perform tasks such as irrigating, operating machinery, or pruning. A few (15 percent) are found in preharvest tasks such as hoeing, thinning, and transplanting. Post-harvest work such as field packing, sorting, and grading employs 15 percent of the SAS workers; 1 percent are supervisors and the remaining 1 percent perform other tasks. Most (71 percent) were paid by the hour, and the median hourly wage for SAS workers in the survey was \$4.85.

In most regions surveyed, the majority of SAS workers are foreign-born or U.S.-born minorities. The exception is the Midwest, where 57 percent of SAS workers are U.S.-born whites. Most SAS workers (80 percent) do not work year-round in the U.S. The average SAS worker spends about 49 percent of the year doing SAS work; 16 percent is spent doing non-SAS work; 16 percent is spent traveling, and the remaining 19 percent is time spent unemployed in the U.S.

Opening & Closing The Border

Immigration laws affecting the flow of foreign workers into the U.S. have a long history. U.S. immigration policies have generally admitted foreign workers to offset temporary labor shortages in times of national emergencies or as an attempt to control immigration. In 1917, the U.S. took the first step to regulate the influx of farmworkers in response to a labor shortage during World War I. Workers were legally permitted to work farm jobs on a temporary basis. Once work was completed, the workers were expected to return to their home countries.

Special Articles

Temporary foreign agricultural worker programs operated sporadically between World Wars I and II, but have been used on a regular basis since the Bracero Program—one of the earliest temporary programs—was enacted in 1942. The Bracero Program expanded during the 1950's, with the most Mexican workers, 459,850, admitted in 1956. The Bracero Program was terminated in 1964, leaving the H-2 program (enacted in 1952) as the only legal means of hiring foreign farmworkers.

The purpose of the H-2 program is to assure agricultural employers an adequate labor supply without depressing wages or threatening the jobs of U.S. workers. The program, later called H-2A, allows U.S. farm employers to hire foreign guest workers temporarily when qualified U.S. workers are not available at the time and place needed. H-2A workers must return to their home countries once the work specified in their contracts is completed. This program is not widely used by agricultural employers—in 1990, only 25,412 temporary farm jobs were filled by H-2A workers. Most H-2A workers are employed by east coast apple, tobacco, and sugarcane producers.

The Immigration Reform and Control Act of 1986 expanded the policy of admitting foreign workers temporarily to include granting permanent residency to some undocumented foreign workers. The motivation for IRCA was persistent, large-scale illegal immigration. Congress believed that illegal migration was detrimental to U.S. citizens seeking employment, and that it could be controlled by cutting off the supply of jobs available to foreign workers who do not have documents showing they are eligible to work in the U.S. This would be accomplished by imposing sanctions, such as fines and jail, against employers who hire undocumented workers.

Rather than risk economic and social disruptions, and huge enforcement costs, by deporting all illegal aliens, IRCA permitted illegals who had resided in the U.S. continuously before January 1, 1982, to apply for legal resident status. Over 1.7 million persons applied before the May 4, 1988 deadline. Most of the applicants were approved and may eventually become U.S. citizens.

Congress recognized that many farmworkers would not qualify for legalization because the seasonal nature of farmwork meant that many illegal farmworkers would not have been in this country year-round and could not meet the residency requirement. Thus, the Special Agricultural Worker (SAW) Program was added to help employers who have traditionally relied on undocumented workers adjust to a legal workforce. The program helps maintain an adequate U.S. seasonal workforce for designated perishable commodities until the program ends in fiscal 1993, thus giving farmers additional time to make labor adjustments.

Special Agricultural Worker Program

For agricultural workers who did not qualify under the resident amnesty provision of IRCA, a Special Agricultural Worker Program was established. The SAW program allowed undocumented workers who worked in seasonal agricultural services for at least 90 days between April 30, 1985 and May 1, 1986, to apply for legal resident status. About 1.3 million persons applied; thus far about 1 million have been approved and these are eligible for citizenship after 2 years. About 80 percent of the SAW applicants are from Mexico. While there is no requirement that any of these people continue to work in agriculture, the U.S. work experience of many is limited to farmwork.

If some immigrants stop working in SAW program crops, the law requires that a portion of those who quit be replaced by new immigrants each fiscal year from 1990 through 1993. New "replenishment" agricultural workers (RAW's) must work in SAW Program crops for at least 90 days per year in each of the first 3 years of their U.S. residence to keep from being deported. To qualify for U.S. citizenship, they must work 90 days each year in these crops for 2 additional years (a total of 5 years). No work visas were issued under the program during the first 2 years, but some of the nearly 700,000 individuals who applied for the RAW program reportedly may be living in the U.S. illegally.

The ability to enforce the employer sanctions issued under IRCA is being hindered by the availability of fraudulent documents. Unauthorized workers can obtain false documents (usually an I-551 green card and a driver's license) that resemble acceptable documents. Furthermore, the new documented workers in the U.S. may have strengthened migration networks by increasing the number of households in rural Mexico with secure, legal family contacts in the U.S. These factors may be contributing to continued unauthorized migration into the U.S. since the passage of IRCA.

The SAW helps producers of perishable crops in three ways. First, the enforcement of employer sanctions in agriculture was phased in more slowly than in other sectors of the economy—enforcement was deferred in most crop agriculture until December 1, 1988. Second, the program legalized over 1 million farmworkers who had jobs in the U.S. performing seasonal agricultural services. Third, the program allows for "replenishment workers" to enter the U.S. if seasonal labor shortages persist. When the SAW Program ends in fiscal 1993, the H-2A program will be farmers' only legal means to import labor from Mexico. [James A. Duffield (202) 219-0932 and Shannon Hamm (202) 219-0886] AO

Mexico's Food Industry Draws U.S. Investment

Since its accession to the General Agreement on Tariffs and Trade (GATT) in 1986, Mexico has taken several unilateral actions to liberalize its trade and foreign investment policies. Mexico has reduced its maximum tariff rate, substituted tariffs for nontariff barriers on many items, and dropped import licensing requirements on several agricultural and processed food products. In addition, rules governing foreign investment have been liberalized, permitting 100-percent foreign ownership in most sectors of the economy.

Combined with domestic economic reforms, the freer investment climate has stimulated the Mexican economy to an average annual real growth of 3.8 percent during the past 3 years. Mexico's population is also growing and is expected to expand from 89 million in 1991 to about 109 million by the year 2000. With an expanding economy and growing population, Mexico's demand for processed food products is increasing.

Mexico is now the fourth-largest market for U.S. exports of food and related products, following Japan, Canada, and South Korea. Mexico accounted for 6 percent of U.S. processed food exports in 1990 and the share is growing. Processed food and feed exports to Mexico nearly doubled from \$887 million in 1988 to about \$1.5 billion in 1991, an average annual growth of over 18 percent.

In 1990, meat and poultry products, including hides and skins, comprised the largest U.S. export category by far, accounting for 39 percent of total U.S. food and kindred products exported to Mexico. Sugar and confections, and the plant and animal fats and oils group, each accounted for another 14 percent. Grain mill products (which include prepared animal feeds and pet foods) accounted for 13 percent of food exports to Mexico, followed by dairy products, processed fruits and vegetables, beverages, and bakery products.

Among individual industries, meat packing is the most important U.S. exporter of processed food to Mexico. The cane sugar refining industry is ranked second, followed by soybean oil production, poultry processing, and the animal and marine fats and oils. Within grain mill products, the wet corn milling industry produces most exports, followed by rice milling, prepared feeds, and flour.

U.S. Firms Concentrate On Direct Investment

Though U.S. exports of processed food to Mexico have increased markedly, many U.S. food firms concentrate on direct investment strategies to increase their presence in the Mexican market. A free trade agreement with Mexico, which could further improve Mexico's incomes and investment climate, would

likely strengthen this commitment to investment, as well as expand trade between the two countries.

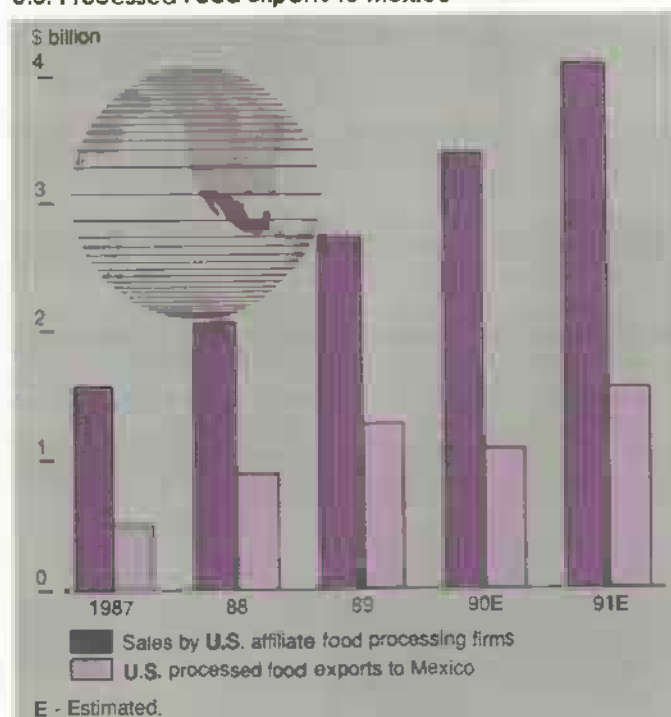
Direct investment to access Mexican and other foreign markets offers several advantages. In 1991, exports by food processing firms to Mexico were \$1.5 billion; but sales by their affiliates located in Mexico were nearly three times as much, \$4.1 billion. In addition to avoiding trade barriers and reducing transportation costs, food processing firms with affiliates in the host country can maintain better control over marketing and distribution activities.

The Mexican government now actively encourages foreign investment from the U.S. and other countries. The Mexican Investment Board (MIB), a joint project of the government and the private financial community, provides information on labor and advice on the viability of projects, refers investors to bankers, helps cut red tape, and sets up meetings with government authorities. With liberalized foreign investment laws, lower trade barriers, and good prospects for a trade agreement, Mexico has become far more attractive to U.S. and other foreign investors.

U.S. Affiliates' Sales Are Up

Sales by U.S. food processing affiliates in Mexico expanded 34 percent from 1988 to 1989, compared with increases of 8 percent in Canada, 20 percent in Europe, and 15 percent overall. Affiliate sales in Mexico continued to grow over 20 percent a year in both 1990 and 1991, and Mexico now ranks eighth in sales as a host country for U.S. affiliates. Mexico is the only less developed country among the top 10 U.S. host nations.

U.S. Affiliates' Sales Are Nearly Triple U.S. Processed Food Exports to Mexico



Special Articles

In 1989, U.S. firms had 33 food processing affiliates in Mexico, each with sales of at least \$3 million. Average sales per affiliate increased from \$55.4 million in 1988 to \$83.4 million in 1989. Of the 33 affiliates, 8 were classified as fruit and vegetable processors, 6 in the grain milling sector, 5 in beverages, 2 in dairy, 1 in meat processing, 1 in baking, and 10 in "all other," including sugar, confections, fats and oils, snacks, seafood, and other food preparations. These affiliates employed 54,000 workers in 1989, up from 48,000 in 1987.

Typically, food processing affiliates are majority owned by their U.S. parents. Across all countries, 73 percent of U.S. affiliates are majority owned. This percentage drops significantly for Mexico, where only 56 percent of U.S. affiliates are majority owned. However, the percentage of majority-owned affiliates there should increase given Mexico's recent liberalization of foreign investment regulations.

U.S. Affiliates Produce For the Mexican Market

A number of U.S. food processing firms are transferring a portion of production, marketing, and technology resources to their Mexican affiliates and joint venture operations. Generally, these firms are more interested in Mexico as a rapidly growing market than as an export platform. With a few notable exceptions, U.S. affiliates in Mexico produce primarily for local markets rather than for export to the U.S.

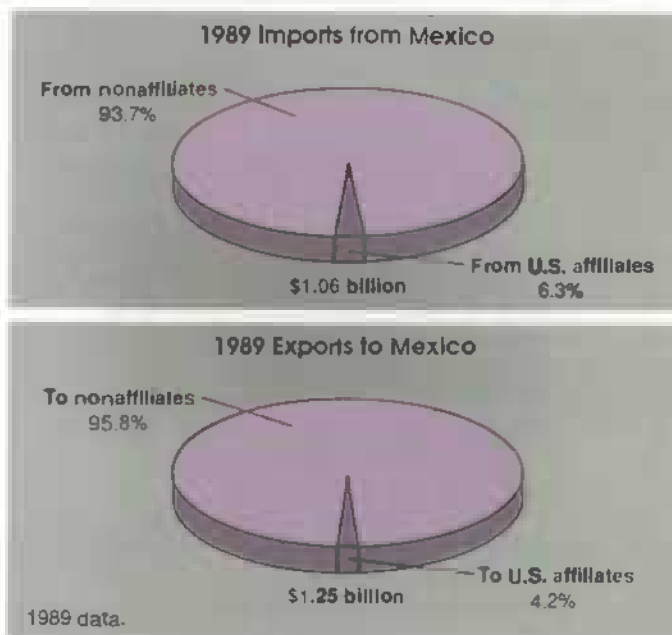
Merchandise trade between the U.S. and its affiliates is surprisingly small. In 1989, the U.S. imported a total of \$1,068 million of processed food from Mexico. Of this amount, only \$67 million, or 6.3 percent, came from U.S.-owned affiliates. The pattern is similar for other host countries. U.S. processed food imports from its affiliates worldwide totaled \$946 million in 1989, which accounted for only 5 percent of all processed food imports.

Likewise, U.S. firms export relatively small amounts to their affiliates in Mexico. The U.S. exported \$52 million of processed food to its Mexican affiliates in 1989. This accounted for only 4 percent of total processed food exports to Mexico. Worldwide the percentage is considerably higher. About 13 percent of the total \$17 billion in U.S. processed food exports in 1989 was shipped to U.S. affiliates. An obvious exception to this pattern of limited trade between affiliates and their U.S. parents are the maquiladora plants along the U.S.-Mexican border, which were set up specifically to process or assemble products for re-export into the U.S.

Major U.S. Food Firms Have Affiliates in Mexico

Data from company reports show that in 1990, 14 of the 50 largest U.S. food processing firms had 33 affiliates or joint ventures

U.S. Trade With Food Processing Affiliates In Mexico Is Small



in the Mexican food and feed processing sector. Some U.S. food processors have operated in Mexico for many years; others have just recently entered. Several smaller U.S. food processors also have ownership interests in food processing plants in Mexico.

Ralston Purina has operated prepared feed plants in Mexico for several years and has just built a new plant to manufacture ready-to-eat cereal. CPC International operates a corn refining plant and consumer products plants, producing items such as salad dressings and oils and margarine. Philip Morris, parent of Kraft General Foods, manufactures a variety of frozen foods, dairy products, and other packaged foods at its three affiliates in Mexico.

In 1990, PepsiCo substantially expanded its investment in Mexican food processing plants. PepsiCo is now by far Mexico's largest processor of salted snacks and its largest cookie manufacturer, in addition to owning a concentrate syrup plant. Sales from PepsiCo's food processing affiliates in Mexico are well over \$1 billion.

Campbell Soup operates two plants in Mexico, which produce a variety of canned and frozen vegetables and other food ingredients. Campbell, which imports tomato paste and other ingredients from its affiliates for its U.S. operations, is among the few firms shipping from affiliate to parent companies. Universal Foods owns two food flavoring and coloring plants. Quaker Oats operates a cereal and a chocolate products plant and is expanding its sports drink operations.

Other U.S. Food Firms Concentrate on Joint Ventures


Some firms concentrate on joint ventures with Mexican companies. McCormick has a longstanding joint venture with a Mexican firm that produces McCormick-brand mayonnaise and spices. Gerber has a joint venture that produces its baby food products for the Mexican market.

Tyson Foods developed an innovative three-party joint venture with the Mexican firm Corporacion Citra and with C. Itoh & Co., Ltd. of Japan. Tyson exports whole broilers from its U.S. plants to Citra where they are deboned and further processed. Citra then exports the finished product to Japan where it is distributed by C. Itoh. Tyson provided technological assistance to Citra to develop deboning and processing plants. Tyson's joint venture augments rather than supplants its U.S.-based deboning and further processing operations.

Other food processors are testing the water by developing joint ventures to facilitate distributing their products in the host country rather than investing in foreign production facilities. For example, Sara Lee recently agreed to a joint venture with Grupo Industrial Bimbo, Mexico's largest bread and bakery manufacturer. Bimbo is one of the few firms in Mexico with its own national distribution network. Bimbo will help Sara Lee distribute its bakery and processed meat products in Mexico, while Sara Lee will help Bimbo distribute its bakery products in the U.S.

U.S. food wholesalers such as McLane Company (owned by Wal-Mart) and Labatt Food Service are opening state-of-the-art wholesale distribution centers in Mexico. Entry by these and other firms will put added pressure on Mexican distribution firms to modernize and reduce costs. Having access to modern wholesalers will help U.S. food processors penetrate Mexican markets whether from their U.S. operations or from their Mexican affiliates. In addition, Wal-Mart and The Price Company have both formed joint ventures with Mexican firms to organize membership wholesale clubs in Mexico. These stores will be similar to the Sam's Clubs and the Price Clubs in the U.S.

Fleming Cos., the largest U.S. grocery wholesaler, also recently signed a joint venture with Grupo Gigante, a leading Mexican supermarket firm. The joint venture, called Gigante-Fleming SA de CV, calls for plans to open four to six large supermarkets in Mexico during 1992.

While U.S. firms are rapidly expanding into Mexico, Mexican direct investment in the U.S. food industry is very small. In 1989, sales from Mexican-owned affiliates in the U.S. were less than \$50 million. A notable exception is Grupo Industrial Maseca SA de CV. Maseca controls over 60 percent of the Mexican corn flour market and has recently expanded into Central America and the U.S. Maseca now produces corn flour in at least three plants in the U.S. It also produces tortillas in 12 plants in five U.S. states and is planning further expansion into several more U.S. cities. [Charles R. Handy (202) 219-0866] 

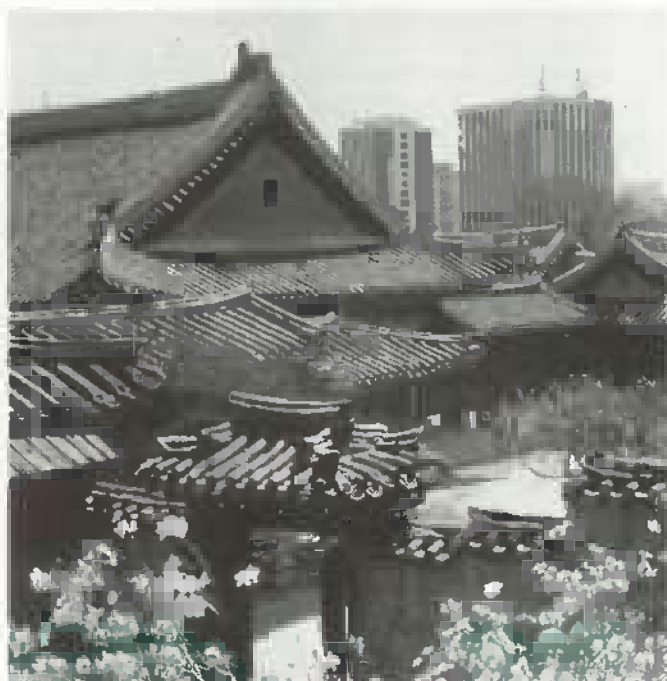
April Releases from USDA's Agricultural Statistics Board

The following reports are issued at 3 p.m. Eastern time on the dates shown.

April

- 1 Hatchery Production - Annual
- 3 Egg Products
- Floriculture Crops
- 6 Poultry Slaughter
- 7 Celery (1 p.m. report)
- Dairy Products
- 9 Vegetables
- 10 Crop Production
- Farm Labor
- 13 Meat Animals - Prod. Disp. & Income
- Turkey Hatchery
- 14 Potato Stocks
- 16 Milk Production
- 22 Catfish
- Cold Storage
- 24 Cattle on Feed
- Eggs, Chickens & Turkeys
- Livestock Slaughter
- 29 Peanut Stocks & Processing
- 30 Agricultural Prices

Special Articles



Korea National Tourism Corporation

Prospects for Trade With an Integrated Korean Market

Although North and South Korea have been divided since World War II, Korean nationalism remains very much alive. Against the background of German reunification and the collapse of centrally planned systems, the Koreans' intense desire for reunification could produce major political changes in the Korean peninsula. What are some of the possibilities and implications for agricultural trade?

First of all, North and South Korea are in many ways complementary zones. Before the peninsula was divided, the North supplied minerals and manufactured items to the South in exchange for rice. Today, South Korea's ample industrial base could make good use of North Korea's resources such as zinc, coal, gold, and hydropower. The North has a consistent shortage of technology, consumer goods, and many foods, and needs capital to develop sectors such as tourism and hydropower.

While land passage across the demilitarized zone between the two countries is still not possible, both countries have adequate ports and shipping fleets to make trade possible. Transshipment via the People's Republic of China (PRC) as well as Hong Kong and Japan is also possible, since both Koreas now trade extensively with these countries.

Although the North Korean government will not yet participate openly in trade with the South, agreements between commercial establishments on both sides are tolerated. A major problem is the North's acute shortage of hard currency. South Korean companies, because of extensive trade initiatives with the former Soviet bloc and the PRC in the 1980's, have learned to overcome currency problems through investment and barter schemes. The South Korean government welcomes trade links with the North as contributing to reconciliation and convergence of interests between the countries.

Despite North Korea's lack of public pronouncements, the government may desire trade even more than South Korea. North Korea has many reasons to trade, but few viable trade relationships. The dissolution of COMECON and the USSR ended several strategic trade arrangements that involved barter. In order to import oil, for instance, North Korea must now use hard currency or seek new barter agreements with Russia or other countries.

But even before the dissolution of the Soviet bloc, North Korea was consistently short of hard currency to buy strategic foreign goods. Having defaulted on its foreign debt, North Korea faces great difficulty securing further credit. Finally, North Korea's harvest in 1990 was probably particularly poor, because of weather problems. A chronic shortage of food, especially rice, became acute.

The size and extent of North-South trade are difficult to estimate with any accuracy. North Korea does not publish trade data, and South Korean data are imprecise because, on paper at least, trade is carried on through third countries. South Korea's estimate of trade in 1991 was \$192 million, with \$26 million in South-North trade, and \$166 million in North-South trade.

Anthracite coal exports from the North may have predated the 1988 announcement that trade with the North was legal and duty-free. Zinc, fish, and coal seem to be the most important commodities exported to the South. The South's exports to the North consist mainly of industrial materials, rice, and sugar. Detailed breakouts are not available.

Agrarian Differences Could Lead to Trade

In the decade after World War II, both countries undertook thorough land reform, but with dramatically different results. In the North, small farms were consolidated into large cooperatives, and a few state-owned farms. Mechanization with large machines on large fields was emphasized.

In the South, a small-farm structure was preserved, with 1 hectare the average. Mechanization in the South meant small machines on very small fields. Both countries use extremely high levels of fertilizer and have invested heavily in extensive irrigation schemes, so that drought is rarely a factor for the rice crop.

History of Poverty & War Divides the Two Koreas

Until the late 19th century, Korea was referred to as the "hermit kingdom" because of its self-imposed isolation from foreign influences. Japan seized the kingdom at the turn of the century, and made it part of the Japanese Empire. Japanese rule was exploitative, and imposed far-reaching economic and social changes.

After World War II, the USSR and the U.S. maintained an active presence in Northeast Asia. Within Korea, both the communist party and anticommunist elements were strong. The 38th Parallel, an arbitrary and political boundary, was used to demarcate the communist from the anticommunist zone. In the Korean conflict (1951-53), the North attempted to conquer the South but was pushed back with U.S. help, and the demarcation line remained in about the same position as before the war.

After 1953, relations were tense, with the North heavily armed and U.S. armed forces maintaining a permanent presence in the South. There was no contact between the two Koreas. Families were split, mainly because many Koreans fled south during the conflict. Propaganda abounded on each side about famine and poverty on the other side, with little factual information available to ordinary citizens.

The two states evolved differently. The North, under the leadership of Kim Il-Sung, developed a philosophy of national self-reliance, called Chuche, and shut itself off as much as possible from foreign cultural, economic, and diplomatic contact. By playing the USSR and the PRC against each other, North Korea was able to retain auton-

omy and gain military and economic aid. Its distrustful stance toward all neighboring countries led the North to commit massive resources to build up arms. The North was traditionally a rice deficit area and probably a food deficit area during the Japanese era, continually struggling to produce enough to feed its population.

The North, rich in minerals and hydropower, inherited most of Korea's manufacturing base developed during Japanese rule. But it has a paucity of arable land and, for much of its history, labor. Mechanization and overwork were emphasized during the communist era, and for a time, the North appeared to grow faster than the South. (North Korea provides no quantitative data on its economy.)

South Korea, more agrarian than the North, was desperately poor after the Korean conflict and received considerable U.S. assistance in the 1950's and 1960's. After 1960, it developed a successful export-oriented growth strategy. South Korea operated under strong central control, although not as completely totalitarian as the North. It vigorously developed first light industry, then heavy industry, as well as trading ability, assiduously borrowing and buying foreign technology.

With relatively abundant labor, and with more arable land than in the North, South Korea's agriculture was not initially a drag on the economy as it apparently was in the North. By the 1970's the South was growing faster than the North, and the gap has widened, although the only reliable data for comparison are available from the South.

While the South has abandoned millet, wheat, and most barley and corn production, the North invested heavily in corn, relying on terracing and irrigation to overcome unfavorable climate and topography. Upland production of wheat, barley, and millet remains at significant levels in the North.

Both countries are deficient in oilseeds, but have large corn starch industries, which supply corn syrups, starch, and oil. The North relies more on corn and rice bran oil than the South, which uses oil from imported soybeans. Both countries have large fishing fleets that provide fish for food, meal, and oil. While livestock product consumption is low by international standards in both countries, South Korea's consumption is much larger than in the North, which has few financial means to import feedstuffs to support a developing livestock sector.

The North has built a large industry to produce synthetic fiber from domestic materials, because it cannot grow cotton or im-

port enough petroleum to make petroleum-based fibers. The South imports cotton and manufactures petroleum-based synthetic fibers such as polyester.

Rice shipments have constituted the most visible trade between the two Koreas, and are important both symbolically and economically. Minor shipments for relief or as goodwill gestures have occurred in both directions. The largest shipment of 5,000 tons took place in 1991 from South to North. It was arranged by a private South Korean company on a barter basis. Coal and cement have been listed as the commodities to be shipped by the North in exchange, but the exact timing and quantities of the shipments are not known.

Other commodities reported to have been traded include potatoes, clams, frozen pollack, and ginseng liquor from the North to the South.

Special Articles

Reconciled, but Separate...

Progress in North-South relations holds two possibilities—reconciliation as separate or federated countries, or reunification. Each scenario has different implications for potential trade in agricultural products. But in either case, more open relations between the North and South also likely mean more open relations with international markets generally.

If the Koreans continue as separate countries, but expand trade access and economic exchanges, North Korea will gain economically from more successful economic development and export trade. It would thus be in a better position to import agricultural commodities.

The North has no comparative advantage in field crops, and even in the absence of greater prosperity, the resource allocation in the North is so distorted that the country would probably gain by giving up some of its strenuous efforts to produce foodstuffs and find ways to import them instead.

Commodities that could be imported to replace or add to domestic supplies include rice (japonica for table use and indica and glutinous for processing), wheat (for noodles), vegetable oils and animal fats, dairy products, and refined sugar. The North's sporadic exports of corn and rice would likely cease.

North Korea's limited pork and poultry industries would probably be expanded, using imported feed grains and oilseed meals. Imports of beef, the favorite Korean meat, are a possibility. Corn—currently used to manufacture simulated rice—would be replaced with imports of real rice, and corn and rice

production would both shrink from current uneconomic levels. Some corn production might continue to maintain the North's large corn starch and oil industry, and some corn might be grown for feed. Trade would be partly with or through the South, especially for rice and refined sugar, but also directly with the international markets.

Given a gradual reconciliation between the two Koreas, South Korea's agricultural trade would also be affected. South Korean light industries are likely to invest in the North, especially in textile and shoe factories. South Korean companies have already invested in new factories in other regions that offer lower labor costs, such as Southeast Asia, and even replaced existing Korean factories with overseas facilities.

South Korean firms would likely transfer some of their domestic or overseas investment to North Korea. This investment shift would imply that some South Korean imports of cotton and hides might go to North Korea instead, and that growth in third-country imports of such raw materials might be replaced by North Korean imports.

In addition to spinning cotton for South Korea's existing worldwide yarn and textile markets, North Korea itself would substitute cotton clothing for some of the synthetic material currently manufactured in the North. The North's 21 million people would also buy more leather footwear, replacing synthetic products. Southern industries transplanted to the North would thus serve both domestic and foreign markets.

Other conceivable shifts in South Korea's trade, under reconciliation with the North, include an increase in imports of raw sugar for refining and shipment to the North. The South has a

North Korea Must Still Import Commodities It Grows

	North Korea		South Korea	
	North Korea		South Korea	
Population	21 million		43 million	
Area	120,540 sq. km		98,480 sq. km	
GDP/person	\$1,390		\$5,600	
Major Industries	Machine building, military production, electrical power, chemicals		Textiles, clothing, footwear, food processing	
Agricultural imports	Over \$205 million		\$6.9 billion	
Agricultural exports	Over \$149 million		\$2.5 billion	
Major foods	Rice, corn, fish, soybeans		Rice, fish, wheat, meats, milk, soybeans	
Major crops	Rice, corn, soybeans, wheat		Rice, barley, soybeans	
Major agricultural imports	Meats, wheat, corn, soybeans, cotton, sugar		Cotton, hides, corn, wheat, soybeans, beef, fish	
Major agricultural exports	Fish, mushrooms, silk, rice		Fish, tobacco, ginseng	

All data are for 1990. North Korean trade data exclude South Korea and former USSR.

Sources: U.S. Central Intelligence Agency, *The World Factbook 1991*; UN trade data from countries reporting trade with North Korea; and South Korea trade data.

Note: North Korea provides no aggregate data on its economy, foreign trade, or agriculture. Estimates are not precise.

Rice: A Special Case

The rice consumed in both Koreas today is almost exclusively japonica, the same short grain rice grown and consumed in Japan. Growth in rice consumption has been limited by strict rationing in the North, extremely high prices in the South, and a ban on imports in the South. After a two-decade effort to become self-sufficient in rice with the aid of high price supports, South Korea now suffers from overproduction and excess stocks. Prevented by international rules from dumping rice overseas, the South, under either reconciliation or reunification will take advantage of the "nonforeign" status it accords the North to reduce its stocks.

The North has a long and poorly understood involvement in rice trade. It exported some rice to the USSR on a long-term basis, and sporadically exported to a number of developing nations. However, the North has also imported substantial quantities of rice in some years, notably in 1987 and 1991. Some of the imports have come from Thailand and are well documented. Others imports, particularly in 1991, appear to have come from the PRC and Vietnam and are not well documented. North Korea's exports, possible only with domestic rationing, appear less likely in the future. Production has probably peaked, while population growth steadily increases even the rationed demand.

With unification or with more rational use of resources as the North becomes integrated into the world economy, its rice production would contract. At the same time, given economic liberalization or rising incomes, rice consumption would increase. If North Korea remains separate, it would be free to import rice from any country. However, its foreign exchange constraints and the likelihood of favorable pricing and financing for purchasing South Korean stocks would be likely to direct its demand to the South. On the other hand, North Korean consumption could be partly met by indica and glutinous rice from third countries, to be used for processing.

Subsidized surplus from the South's farms might be enough to keep both North and South adequately supplied for a few years. South Korea's current rice surplus will shrink, however, because it has withdrawn support for its highest yielding rice varieties, whose taste consumers have rejected. Unified or not, Korea might enter the world rice market in the late 1990's as an importer.

long history of sugar refining and re-export. Increased consumer demand in North Korea would expand the world market, if foreign exchange constraints that limit sugar consumption were lessened. South Korea's soybean-crushing industry might also be well positioned to supply meal and oil to the North.

Some agricultural imports by the South, principally cotton and hides, would decline, but these would be balanced by imports into the North at least as large. The South's imports of some agricultural products, such as sugar and oilseeds, might grow as it engages in processing for the North.

The net impact on world agricultural trade in the event of a reconciliation of North Korea with the South and with the world economy would be favorable, with trade-enhanced prosperity stimulating more consumer spending.

...Or Reunified?

Under reunification, the North is likely to be brought into South Korea's agricultural policy regime, which is highly protectionist. The South would be expected to subsidize considerably higher living standards in the North, including major changes in diet.

The combined nation would import more oilseeds, raw sugar, and beef. South Korea's textile and shoe industries might expand operations to the North in search of cheaper labor, although labor costs in the North could be higher than if no reunification occurred. In any event these industries would have a larger potential domestic market, so that cotton and hides imports would expand.

The integration of the corn starch and oil industries in the North and South and the future of the North's large production of corn for starch would be major question marks. With its heavy protection of grain production, the South might attempt to divert some of the North's corn for feed use for the South's livestock industry. The South's pork, poultry, and dairy industries might expand to the North, protected by trade barriers. An increase in feed grain use would increase beyond what the North's cornfields could provide, increasing feed grain imports from outside the country.

Rice consumption in the North, rationed for decades, would grow and production would contract, but the subsidized surplus from the South's farms might be enough to keep the unified country self-sufficient for a time.

Although U.S. food exports to North Korea have been legal since 1988, the North has no currency to purchase U.S. farm products, and to date no significant trade has taken place. However, the U.S. would be a leading candidate to provide beef, hides, cotton, wheat, corn, soymeal and oil, and rice to North Korea, if reconciliation or reunification overcomes the constraints of poverty and ideology that currently prevent trade.

Prospects for a New Relationship

Enmity between the political elites of North and South Korea is reflected in the mass sentiments of both populations. But mass sentiment is softening with the passage of time and the emergence of new generations who did not experience the Korean conflict.

Special Articles

South Korea has undergone major changes in its political system and attitudes during the 1980's. Multiparty democracy is stronger, and freedom of expression far greater than before. The former ruling party has merged with segments of the old opposition, diluting old antagonisms. Leftist ideas have been tolerated, and anticommunist propaganda has subsided. Even open sympathy for the North has been tolerated to a degree.

While this openness at first led to a wave of pro-North sentiment among students, the more open and factual discussion about the North's system and economy seems to have reduced the appeal of Kim Il-Sung to young South Koreans in recent years, as severe shortcomings in the North's system have become more apparent. Increased information obtained by South Korean officials, business people, and others traveling to the North has given South Korea a fuller and more accurate understanding of the North.

Overall, bitterness is fading, and Korean nationalism is still strong in both societies, driving leadership toward reconciliation or reunification. But several initiatives in the 1980's ultimately failed to move beyond the talking stage. The North appears reluctant to open its population to information about the South. So a degree of skepticism about North-South political reconciliation is warranted, especially about reunification in this decade.

Foreign events are, however, exerting an impact. The speed of the collapse of the entire Soviet bloc was not lost on Koreans.

And the absorption of East Germany by West Germany was a phenomenon particularly relevant to Korea, although differences between Korea and Germany are still significant. North Korea is far more closed to the rest of the world than East Germany was, and far more totalitarian. The government's position is in one sense stronger than that of East Germany, because control is tighter and the populace less aware of world events.

On the other hand, the North's economy is in some ways weaker and less sustainable than East Germany's, because of its greater isolation from world technological developments of the last 40 years. Unlike East Germany, North Korea failed to use trade to develop hard currency reserves to buy needed goods and technology.

More progress has been made than observers would have thought possible 5 years ago. Each of the Koreas recently agreed to the other's taking a United Nations seat, and an agreement in December promised a range of new contacts and initiatives. The December accord has been accompanied by a reduction in military tension and by progress in ensuring a nuclear-free peninsula. Both Koreas appear ready to cooperate in a regional development of the Tumen River basin, where Korea, China, and Russia meet. North Korea lies in one of the richest regional markets in the world for agricultural goods. With a combined population about half the size of Japan, the potential value of a new Korean agricultural market, integrated into the world economy, could be very high. [John Dyck (202) 219-0610] AO

USDA's Economic Research Service reports on . . .

Flue-Cured Tobacco Farms: Selected Characteristics

- Structure of farms in five Southeastern states
 - How production has changed since the 1970's
 - Facts on labor use and wage rates, farm size and tenure, harvest systems and quota arrangements

It's easy to order

Dial 1-800-999-6779 toll free in the U.S. and Canada
(Other areas please dial 301-725-7937)

Or send a check to:

ERS-NASS
P.O. Box 1608
Rockville, MD 20849-1608

\$8 per copy (non-U.S. addresses add 25 percent)

Order number AER-653



Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1991					1992			
	I	II	III	IV	Annual	I F	II F	III F	Annual F
Prices received by farmers (1977=100)	145	151	147	139	146	140	—	—	—
Livestock & products	167	165	159	155	162	155	—	—	—
Crops	123	136	135	123	130	125	—	—	—
Prices paid by farmers, (1977=100)									
Production items	173	175	173	172	173	173	—	—	—
Commodities & services, interest, taxes, & wages	188	169	189	188	189	188	—	—	—
Cash receipts (\$ bil.) 1/	162	163	173	167	167	164	—	—	—
Livestock (\$ bil.)	87	64	66	67	66	84	—	—	—
Crops (\$ bil.)	76	60	87	79	81	80	—	—	—
Market basket (1982-84=100)									
Retail cost	137	139	137	137	137	—	—	—	—
Farm value	109	109	105	101	108	—	—	—	—
Spread	153	154	154	155	154	—	—	—	—
Farm value/retail cost (%)	29	28	27	26	27	—	—	—	—
Retail prices (1982-84=100)									
Food	136	137	136	137	137	138	—	—	—
At home	136	137	135	136	136	136	—	—	—
Away from home	136	137	139	141	138	141	—	—	—
Agricultural exports (\$ bil.) 2/	11.3	8.8	8.4	11.3	37.5	—	—	—	40.0
Agricultural imports (\$ bil.) 2/	5.8	5.5	5.3	5.8	22.8	—	—	—	22.0
Commercial production									
Red meat (mil. lb.)	9,465	9,838	9,985	10,316	39,402	10,075	10,050	10,475	41,010
Poultry (mil. lb.)	5,837	6,296	6,490	6,280	24,872	3,203	6,515	6,645	25,943
Eggs (mil. doz.)	1,422	1,420	1,441	1,475	5,758	1,440	1,430	1,445	5,790
Milk (bil. lb.)	37.5	38.8	38.3	38.2	148.5	37.8	38.7	38.4	149.2
Consumption, per capita *									
Red meat and poultry (lb.)	50.8	53.4	54.5	55.9	214.7	53.9	54.9	56.5	222.3
Corn beginning stocks (mil. bu.) 3/	1,344.5	6,940.3	4,789.0	2,992.0	1,344.5	1,521.2	6,537.7	—	1,521.2
Corn use (mil. bu.) 3/	2,339.1	2,151.8	1,797.8	1,472.2	7,760.7	2,464.5	—	—	7,925.0
Prices 4/									
Choice steers—Neb. Direct (\$/cwt) **	80.09	77.92	69.15	69.96	74.28	75-76	71-77	70-76	71-77
Barrows & gilts—7 mths. (\$/cwt)	51.50	53.34	50.85	39.84	48.88	38-39	39-45	38-44	37-43
Broilers—12-city (cts./lb.)	51.2	52.2	54.2	50.5	52.0	50-51	47-53	48-54	47-53
Eggs—NY gr. A large (cts./doz.)	85.9	70.2	77.1	76.8	77.5	66-67	69-75	73-79	70-77
Milk—all at plant (\$/cwt)	11.80	11.37	12.30	13.67	12.23	12.95-13.25	11.20-12.20	11.60-12.60	12.20-13.00
Wheat—KC HRW ordinary (\$/bu.)	2.81	3.00	3.11	3.82	3.18	—	—	—	—
Corn—Chicago (\$/bu.)	2.43	2.48	2.47	2.49	2.42	—	—	—	—
Soybeans—Chicago (\$/bu.)	5.70	5.73	5.65	5.66	5.69	—	—	—	—
Cotton—Avg. spot 41-34 (cts./lb.)	75.4	81.0	66.7	55.8	69.7	—	—	—	—
	1984	1985	1986	1987	1988	1989	1990	1991	1992 F
Gross cash income (\$ bil.)	158.1	157.9	152.8	165.1	171.9	179.9	186.0	182	178-186
Gross cash expenses (\$ bil.)	118.7	110.7	105.0	109.8	114.5	120.5	124.2	125	126-131
Net cash income (\$ bil.)	37.4	47.1	47.8	55.3	57.4	59.4	61.8	57	49-55
Net farm income (\$ bil.)	26.1	28.8	31.0	39.7	40.6	50.1	50.6	42	37-43
Farm real estate values 5/									
Nominal (\$ per acre)	801	713	640	599	632	661	668	662	689-702
Real (1982 \$)	771	662	577	526	538	545	529	519	503-514

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages, Jan.-Dec. 5/ 1990-92 values as of January 1. 1986-89 values as of February 1. 1984-85 values as of April 1. F = forecast, — = not available.

* The pork carcass to retail conversion factor has been revised. ** Omaha Choice steer price has been replaced by the Nebraska Direct, 1,100-1,300 lb. Choice steer price.

U.S. & Foreign Economic Data

Table 2.—U.S. Gross Domestic Product & Related Data

	Annual			1990	1991			
	1989	1990	1991 R	IV	I	II	III	IV R
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross domestic product	5,244.0	5,513.8	5,674.4	5,557.5	5,589.0	5,652.8	5,709.2	5,746.7
Gross national product	5,248.2	5,524.5	—	5,583.2	5,611.7	5,660.6	5,720.1	—
Personal consumption expenditures	3,517.9	3,742.6	3,888.8	3,812.0	3,827.7	3,868.5	3,918.4	3,942.4
Durable goods	459.8	485.9	445.1	451.9	440.7	440.0	452.9	446.9
Nondurable goods	1,146.9	1,217.7	1,252.5	1,246.4	1,246.3	1,252.9	1,257.4	1,253.4
Clothing & shoes	200.5	208.7	211.0	208.8	208.2	212.8	214.6	208.6
Food & beverages	583.3	595.8	619.7	604.8	618.3	620.5	620.4	621.6
Services	1,911.2	2,059.0	2,191.1	2,113.8	2,140.7	2,175.6	2,208.1	2,242.2
Gross private domestic investment	837.6	802.6	727.4	750.9	709.3	708.8	740.9	750.5
Fixed investment	801.6	802.7	744.9	787.4	748.4	745.8	744.5	740.8
Change in business inventories	36.0	0.0	-17.6	-36.5	-39.2	-37.1	-3.6	9.7
Net exports of goods & services	-82.9	-74.4	-29.7	-76.6	-36.8	-17.2	-37.3	-26.3
Government purchases of goods & services	971.4	1,042.9	1,087.6	1,071.2	1,088.8	1,092.5	1,089.1	1,080.1
1987 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross domestic product	4,836.9	4,884.9	4,849.9	4,855.1	4,824.0	4,840.7	4,882.7	4,872.2
Gross national product	4,840.7	4,894.6	—	4,877.7	4,843.7	4,847.8	4,872.0	—
Personal consumption expenditures	3,223.1	3,262.6	3,258.6	3,251.8	3,241.1	3,252.4	3,271.2	3,269.5
Durable goods	440.8	438.9	412.5	424.0	410.8	408.9	418.3	411.9
Nondurable goods	1,049.3	1,050.8	1,043.5	1,044.7	1,043.9	1,046.2	1,046.1	1,037.7
Clothing & shoes	187.9	187.4	182.9	184.1	181.7	186.1	184.7	179.1
Food & beverages	513.3	515.8	517.5	515.9	519.7	517.0	517.4	516.9
Services	1,732.9	1,773.0	1,802.6	1,783.1	1,786.3	1,797.2	1,806.8	1,819.9
Gross private domestic investment	789.2	744.5	674.2	696.6	657.0	656.3	686.5	697.1
Fixed investment	756.6	744.2	687.3	727.8	689.8	688.8	688.5	686.2
Change in business inventories	32.6	0.2	-13.1	-31.2	-32.8	-30.4	0.1	10.9
Net exports of goods & services	-75.7	-51.3	-19.8	-31.2	-18.6	-12.3	-31.1	-17.6
Government purchases of goods & services	900.4	929.1	937.0	937.9	944.5	944.3	936.1	923.2
GDP implicit price deflator (% change)	4.3	4.2	3.6	3.2	5.0	3.1	2.1	1.7
Disposable personal income (\$ bil.)	3,788.6	4,058.8	4,219.2	4,137.5	4,151.0	4,207.5	4,238.2	4,290.3
Disposable per. income (1987 \$ bil.)	3,471.2	3,538.3	3,535.5	3,529.5	3,514.8	3,537.4	3,539.9	3,549.7
Per capita disposable per. income (\$)	16,313	16,236	16,693	16,479	16,492	16,678	16,752	16,869
Per capita dis. per. income (1987 \$)	14,090	14,154	13,992	14,058	13,985	14,022	13,992	13,990
U.S. population, total, incl. military abroad (mil.)	248.8	251.4	254.0	252.5	253.1	253.7	254.4	254.7
Civilian population (mil.)	246.6	249.2	251.9	250.4	250.9	251.5	252.3	252.5
	Annual			1991				1992
	1989	1990	1991	Jan	Oct	Nov	Dec	Jan
Monthly data seasonally adjusted								
Industrial production (1987=100)	108.1	109.2	107.1	106.6	108.4	108.1	107.6	106.7
Leading economic indicators (1982=100)	144.9	144.0	143.4	138.8	145.8	145.5	145.2	146.5
Civilian employment (mil. persons)	117.3	117.9	118.9	117.0	118.9	118.8	118.7	117.1
Civilian unemployment rate (%)	5.2	5.4	6.6	6.1	6.8	6.8	7.0	7.0
Personal income (\$ bil. annual rate)	4,380.2	4,679.8	4,835.3	4,761.5	4,884.8	4,880.6	4,931.1	4,929.4
Money stock—M2 (daily avg.) (\$ bil.) 1/	3,227.3	3,332.4	3,442.3	3,336.5	3,420.3	3,434.4	3,442.3	3,452.1
Three-month Treasury bill rate (%)	8.12	7.51	6.42	6.30	6.03	4.90	4.12	3.84
AAA corporate bond yield (Moody's) (%)	9.26	9.32	8.77	9.04	8.55	8.48	8.31	8.20
Housing starts (1,000) 2/	1,376	1,193	1,015	844	1,085	1,085	1,106	1,187
Auto sales at retail, total (mil.)	9.9	9.5	9.4	7.8	8.3	8.3	7.9	9.0
Business inventory/sales ratio	1.51	1.51	1.52	1.58	1.50	1.50	1.53	—
Sales of all retail stores (\$ bil.)	145.1	150.6	151.8	147.7	152.5	152.5	152.7 P	153.5
Nondurable goods stores (\$ bil.)	90.8	96.0	98.1	97.0	97.8	98.3	98.3 P	98.9
Food stores (\$ bil.)	28.8	30.2	30.9	30.7	30.9	31.0	31.1 P	31.3
Eating & drinking places (\$ bil.)	14.5	15.2	15.8	15.3	15.9	16.0	16.6 P	16.7
Apparel & accessory stores (\$ bil.)	7.8	7.9	8.0	7.5	7.9	7.9	7.9 P	7.8

1/ Annual data as of December of the year listed. 2/ Private, including farm. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Exports

	1983	1984	1985	1986	1987	1988	1989	1990	1991 E	1992 F	1993 F	Average 1981-90
	Annual percent change											
World, less U.S.												
Real GDP	2.4	3.4	3.0	3.1	3.1	3.9	3.2	1.1	-1.0	1.1	3.0	2.8
GDP deflator	7.5	6.9	7.2	6.9	8.4	10.9	11.3	42.5	25.2	23.0	18.9	12.0
Real exports	2.2	8.8	2.5	3.4	6.0	7.8	7.1	5.3	1.3	4.4	6.3	4.9
Developed less U.S.												
Real GDP	2.1	3.4	3.4	2.8	3.3	4.4	3.6	2.9	1.2	1.7	3.0	2.8
GDP deflator	6.2	4.9	3.9	3.9	2.7	3.1	3.8	3.6	4.4	4.2	2.0	4.8
Real exports	2.7	10.6	5.4	-0.1	4.1	7.3	9.7	7.8	3.8	2.6	4.9	5.7
Eastern Europe & C.I.S.												
Real GDP	2.7	2.0	0.7	3.5	1.2	1.7	1.0	-6.8	-14.4	-8.4	-2.0	0.9
GDP deflator 1/	3.1	3.0	4.2	5.7	8.2	22.5	25.8	190.1	73.1	53.2	36.3	29.2
Real exports	2.8	3.7	-6.8	11.6	6.3	7.4	-5.9	-10.1	-30.4	-1.1	0.2	1.0
Developing												
Real GDP	3.0	4.5	4.0	4.1	4.0	4.4	3.5	1.7	2.2	5.3	5.8	3.3
GDP deflator	38.7	37.3	36.4	25.5	33.1	26.5	19.5	17.7	11.9	12.9	12.2	29.1
Real exports	0.5	7.7	1.8	8.0	11.7	9.9	9.4	4.4	4.0	6.0	6.2	5.1
Asia												
Real GDP	8.4	7.5	6.4	7.0	7.8	9.0	5.3	5.5	5.2	6.1	6.6	6.8
GDP deflator	6.3	7.5	5.9	4.4	7.8	8.2	6.1	8.3	8.2	8.3	7.4	6.7
Real exports	6.4	11.3	2.9	18.9	15.8	14.9	8.2	6.6	7.4	8.5	8.5	9.1
Latin America												
Real GDP	-2.7	3.7	3.6	4.4	3.0	0.0	1.3	-0.9	2.8	3.6	4.2	1.1
GDP deflator 1/	30.0	41.2	68.8	59.5	124.8	31.8	37.0	32.1	16.5	18.1	17.6	48.4
Real exports	2.0	12.0	2.0	0.0	8.0	6.8	10.4	0.3	-0.7	3.1	5.1	4.0
Africa												
Real GDP	0.7	2.1	2.4	1.8	0.3	2.4	3.1	2.4	2.4	3.6	3.6	1.8
GDP deflator	16.4	12.1	12.2	8.0	25.1	17.1	19.4	15.2	17.8	13.3	8.4	14.3
Real exports	-5.3	-1.5	3.5	-1.0	0.0	2.9	5.0	8.5	4.1	7.7	5.6	-1.9
Middle East												
Real GDP	3.5	1.5	0.9	-1.2	-0.7	1.6	2.5	-6.5	-9.8	7.8	8.2	0.1
GDP deflator	-3.6	1.7	3.2	6.6	15.0	10.3	12.8	19.3	-2.5	10.1	14.1	8.1
Real exports	-19.6	-6.7	-7.1	-3.8	24.6	4.8	21.0	4.3	4.7	17.3	36.8	0.0

1/ Excludes Yugoslavia, Argentina, Brazil, & Peru starting in 1989. E = estimate. F = forecast.

Information contact: Alberto Jerardo, (202) 219-0717.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1991					1992	
	1989	1990	1991 P	Feb	Sept	Oct	Nov	Dec	Jan R	Feb P
	1977 = 100									
Prices received										
All farm products	148	149	148	144	147	142	139	137	138	142
All crops	134	127	130	122	137	126	124	120	123	127
Food grains	158	123	116	102	118	128	133	142	146	161
Feed grains & hay	126	123	118	118	116	115	116	117	119	123
Feed grains	123	118	115	114	116	114	115	116	119	123
Cotton	98	107	108	112	107	104	101	92	85	80
Tobacco	149	152	159	160	180	159	163	161	157	157
Oil-bearing crops	102	93	90	94	87	84	83	83	84	84
Fruit, all	164	188	270	207	387	272	217	209	207	211
Fresh market 1/	205	197	295	218	438	297	229	219	217	222
Commercial vegetables	145	142	135	120	116	116	149	112	137	155
Fresh market	144	144	140	117	112	113	158	105	139	161
Potatoes & dry beans	186	189	144	133	112	105	103	103	101	101
Livestock & products	180	170	162	166	167	168	164	154	152	157
Meat animals	174	193	186	166	175	176	170	166	167	178
Dairy products	140	141	125	121	132	138	142	142	139	136
Poultry & eggs	137	131	125	122	124	123	121	127	118	111
Prices paid										
Commodities & services										
Interest, taxes, & wage rates	178	184	189	—	—	189	—	—	186	—
Production items	165	171	173	—	—	172	—	—	171	—
Feed	138	128	123	—	—	123	—	—	124	—
Feeder livestock	194	213	214	—	—	203	—	—	199	—
Seed	165	165	163	—	—	163	—	—	163	—
Fertilizer	137	131	134	—	—	132	—	—	132	—
Agricultural chemicals	136	139	161	—	—	164	—	—	164	—
Fuels & energy	180	204	203	—	—	200	—	—	182	—
Farm & motor supplies	150	154	157	—	—	159	—	—	160	—
Autos & trucks	223	231	244	—	—	248	—	—	248	—
Tractors & self-propelled machinery	193	202	211	—	—	218	—	—	216	—
Other machinery	208	216	229	—	—	230	—	—	230	—
Building & fencing	141	144	148	—	—	147	—	—	147	—
Farm services & cash rent	161	166	170	—	—	170	—	—	171	—
Int. payable per acre on farm real estate debt	179	173	172	—	—	172	—	—	166	—
Taxes payable per acre on farm real estate	151	158	160	—	—	160	—	—	165	—
Wage rates (seasonally adjusted)	185	191	201	—	—	193	—	—	193	—
Production items, interest, taxes, & wage rates	187	172	175	—	—	173	—	—	172	—
Ratio, prices received to prices paid (%) 2/	83	81	77	77	78	75	74	72	73	76
Prices received (1910-14=100)	674	681	667	660	672	651	636	628	630	651
Prices paid, etc. (parity index) (1910-14=100)	1,221	1,265	1,299	—	—	1,298	—	—	1,295	—
Parity ratio (1910-14=100) (%) 2/	55	54	51	—	52	50	49	48	48	—

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1991					1992	
	1989	1990	1991 P	Feb	Sept	Oct	Nov	Dec	Jan R	Feb
CROPS										
All wheat (\$/bu.)	3.72	2.61	3.00-3.10	2.42	2.80	3.07	3.24	3.44	3.55	3.98
Rice, rough (\$/cwt)	7.35	6.70	7.20-7.50	6.69	7.61	7.58	7.58	7.92	7.77	7.72
Corn (\$/bu.)	2.36	2.28	2.30-2.60	2.32	2.33	2.31	2.29	2.33	2.40	2.47
Sorghum (\$/cwt)	3.75	3.79	4.02-4.55	3.88	4.10	3.93	3.95	3.99	4.07	4.25
All hay, baled (\$/ton)	85.40	83.20	72.00	77.80	68.10	68.80	69.10	68.40	69.00	70.60
Soybeans (\$/bu.)	5.99	5.75	5.25-5.75	5.65	5.64	5.49	5.48	5.45	5.54	5.53
Cotton, upland (cts./lb.)	66.2	68.2	—	67.9	65.2	62.5	62.4	55.6	51.6	48.4
Potatoes (\$/cwt)	7.36	6.08	5.05	5.53	4.62	4.25	4.13	4.14	4.05	4.01
Lettuce (\$/cwt) 2/	12.60	11.50	12.10	6.61	11.30	10.60	28.80	9.12	7.14	6.98
Tomatoes fresh (\$/cwt) 2/	33.10	27.30	32.60	31.60	21.90	20.60	30.60	15.90	40.50	59.40
Onions (\$/cwt)	11.40	10.50	11.80	10.20	10.10	8.60	9.08	10.50	10.70	10.70
Dry edible beans (\$/cwt)	28.50	18.50	15.90	18.20	14.40	14.40	15.70	15.00	15.00	15.30
Apples for fresh use (cts./lb.)	13.9	20.9	—	20.3	29.1	24.9	25.3	25.7	24.9	24.9
Pears for fresh use (\$/ton)	336.00	360.00	392.00	377.00	477.00	411.00	401.00	401.00	383.00	347.00
Oranges, all uses (\$/box) 3/	7.08	6.16	7.31	6.80	21.97	11.09	5.91	5.95	5.93	6.90
Grapefruit, all uses (\$/box) 3/	4.41	5.86	5.26	4.64	1.38	6.24	6.16	6.31	5.92	5.66
LIVESTOCK										
Beef cattle (\$/cwt)	69.70	74.80	72.90	77.00	68.70	70.40	67.90	67.40	68.90	72.70
Calves (\$/cwt)	91.80	96.50	100.00	104.00	96.10	93.90	90.00	87.60	88.30	93.00
Hogs (\$/cwt)	43.20	64.00	48.80	52.50	46.40	43.60	38.00	38.60	38.40	40.40
Lambs (\$/cwt)	67.30	56.00	52.60	45.80	53.60	51.70	50.20	62.00	53.50	55.60
All milk, sold to plants (\$/cwt)	13.56	13.78	12.23	11.70	12.80	13.40	13.70	13.80	13.50	13.20
Milk, manuf. grade (\$/cwt)	12.38	12.34	11.09	10.20	12.10	12.70	12.70	12.50	11.80	11.40
Broilers (cts./lb.)	36.1	32.4	31.0	29.9	32.1	31.1	29.6	29.0	30.0	29.9
Eggs (cts./doz.) 4/	70.0	70.4	66.9	67.7	63.0	63.8	64.0	71.8	58.2	64.3
Turkeys (cts./lb.)	40.0	38.4	38.5	34.4	40.2	38.9	40.0	40.9	37.4	35.3
Wool (cts./lb.) 5/	124.0	80.00	54.0	42.1	53.9	66.6	51.4	40.4	30.6	47.9

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Excludes Hawaii. 3/ Equivalent on-tree returns. 4/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 5/ Average local market price, excluding incentive payments. P = preliminary. R = revised. — not available.

Information contact: Ann Duncan (202) 219-0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1991								1992
	1991	Jan	June	July	Aug	Sept	Oct	Nov	Dec	Jan
		1982-84=100								
Consumer Price Index, all items	136.2	134.6	136.0	136.2	136.6	137.2	137.4	137.8	137.9	138.1
Consumer Price Index, less food	136.1	134.3	135.7	136.1	136.7	137.4	137.7	138.0	138.1	138.3
All food	138.3	135.8	137.2	136.5	136.0	136.0	135.8	136.2	136.7	137.2
Food away from home	137.9	135.8	137.9	138.4	138.7	138.9	139.1	139.3	139.6	139.7
Food at home	135.8	136.4	137.4	136.0	134.9	134.9	134.4	135.0	135.5	136.4
Meats 1/	132.5	133.5	133.5	133.1	132.9	131.9	131.3	131.5	130.8	130.0
Beef & veal	132.4	132.9	133.2	132.6	132.3	131.0	130.7	131.9	131.7	131.2
Pork	134.1	136.5	136.1	136.7	135.7	134.1	132.7	131.3	128.5	127.8
Poultry	131.5	131.3	131.5	132.5	132.4	131.0	131.0	129.3	130.2	131.2
Fish	148.3	151.1	146.7	146.1	145.2	147.8	149.4	149.5	150.4	154.6
Eggs	121.2	139.8	110.2	113.9	121.0	118.0	116.8	115.4	123.5	113.9
Dairy products 2/	125.1	125.2	123.9	124.0	124.5	125.3	125.7	126.2	127.4	128.2
Fats & oils 3/	131.7	132.4	131.6	131.6	132.1	131.1	131.7	129.8	129.3	130.7
Fresh fruit	163.9	190.2	204.4	198.8	187.4	194.3	185.4	183.9	188.6	188.6
Processed fruit	131.8	134.7	131.2	130.6	130.9	131.3	130.5	131.4	131.5	136.0
Fresh vegetables	154.4	159.9	180.5	157.7	142.2	137.6	134.0	149.6	150.7	152.7
Potatoes	144.6	139.6	165.8	164.3	156.2	143.7	132.1	129.9	129.0	130.9
Processed vegetables	128.5	127.7	130.0	129.3	128.7	128.1	128.7	127.7	127.6	129.2
Cereals & bakery products	145.8	144.3	145.7	145.8	146.5	146.5	146.9	147.5	147.4	148.9
Sugar & sweets	129.3	127.3	129.5	129.9	130.3	129.6	130.5	130.6	130.9	132.0
Beverages, nonalcoholic	114.1	115.7	113.9	113.1	112.9	112.8	113.9	113.0	112.5	114.9
Apparel										
Apparel, commodities less footwear	127.4	122.0	125.2	123.2	123.2	130.4	132.0	132.2	128.2	126.0
Footwear	120.9	117.3	120.2	119.3	120.2	122.2	123.4	123.4	121.8	121.3
Tobacco & smoking products	202.7	195.8	202.9	203.7	204.7	205.7	206.1	209.0	211.7	212.6
Beverages, alcoholic	142.8	137.3	143.0	143.4	143.8	144.4	144.5	144.0	143.9	144.8

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1991						1992
	1989	1990	1991 P	Jan	Aug	Sept R	Oct	Nov	Dec	Jan
	1982 = 100									
Finished goods 1/	113.6	119.2	121.7	122.3	121.7	121.4	122.3	122.3	121.9	121.7
Consumer foods	118.7	124.4	124.1	124.8	123.3	122.7	123.0	123.1	122.2	122.5
Fresh fruit	113.2	118.1	129.4	127.4	136.9	135.3	122.5	111.1	99.6	100.0
Fresh & dried vegetables	116.7	118.1	103.8	97.0	91.4	87.7	78.1	106.5	80.1	108.3
Dried fruit	103.0	106.7	111.5	111.1	110.5	111.8	111.9	111.8	112.0	113.7
Canned fruit & juice	122.7	127.0	128.6	128.2	128.1	129.6	130.3	131.3	133.2	134.7
Frozen fruit & juice	123.9	139.0	116.1	115.1	111.4	111.4	116.5	124.7	125.6	133.9
Fresh veg. excl. potatoes	103.9	107.8	100.2	89.3	82.6	81.8	73.5	113.1	76.1	117.5
Canned veg. & juices	118.6	116.7	112.8	114.8	112.2	111.4	111.2	110.1	109.8	109.7
Frozen vegetables	115.5	118.4	117.6	118.4	117.2	117.6	116.6	116.5	118.8	118.8
Potatoes	153.6	157.3	125.7	134.0	123.7	110.6	97.0	93.2	96.4	94.7
Eggs	119.6	117.6	110.7	140.0	109.0	105.8	105.0	102.1	118.7	91.9
Bakery products	135.4	141.0	148.6	144.9	147.3	147.6	147.7	148.4	148.9	149.1
Meats	104.8	117.0	113.3	117.3	111.5	108.5	108.7	105.9	104.8	103.7
Beef & veal	108.9	116.0	112.1	118.1	105.0	104.8	108.9	108.2	106.4	106.9
Pork	97.7	119.8	113.0	116.3	117.6	108.7	108.4	99.4	96.7	92.8
Processed poultry	120.4	113.6	109.9	107.8	114.0	112.8	111.2	108.8	105.5	105.5
Fish	142.9	147.2	151.3	157.8	135.8	138.9	153.1	155.3	156.3	160.2
Dairy products	110.6	117.2	114.6	112.3	116.1	115.9	119.1	119.7	120.1	118.5
Processed fruits & vegetables	119.9	124.7	119.5	120.0	118.7	118.6	119.2	119.9	120.4	121.9
Shortening & cooking oil	116.6	123.2	116.4	119.3	115.1	115.6	114.2	112.6	114.1	112.0
Soft drinks	177.7	122.3	125.6	127.2	124.5	124.8	125.3	124.9	124.1	124.7
Consumer finished goods less foods	108.9	115.3	118.7	119.8	119.0	119.0	119.7	119.7	119.3	118.7
Beverages, alcoholic	115.2	117.2	123.7	124.4	123.5	123.3	123.1	123.4	123.3	125.7
Apparel	114.5	117.5	119.6	118.3	120.0	120.2	120.4	120.3	120.5	120.8
Footwear	120.8	125.6	128.6	126.3	129.3	129.5	129.2	129.4	129.6	129.8
Tobacco products	194.8	221.4	249.3	237.4	255.0	254.9	255.0	255.3	267.1	268.4
Intermediate materials 2/	112.0	114.5	114.4	116.4	114.2	114.6	114.1	114.1	113.7	113.2
Materials for food manufacturing	112.7	117.9	115.3	115.4	115.3	114.8	115.3	114.4	114.6	114.2
Flour	114.6	103.6	97.6	91.2	96.4	98.6	102.6	104.9	109.6	116.5
Refined sugar 3/	118.2	122.7	121.8	123.1	121.4	121.2	121.2	121.0	120.8	120.8
Crude vegetable oils	103.1	115.8	103.2	110.7	100.5	101.7	100.7	95.4	95.9	94.7
Crude materials 4/	103.1	108.9	101.2	112.8	99.1	98.0	99.6	99.7	97.7	97.3
Foodstuffs & feedstuffs	111.2	113.1	105.5	107.2	102.7	103.0	102.5	101.6	101.9	104.0
Fruits & vegetables 5/	114.6	117.5	114.5	109.8	110.9	108.1	97.2	108.0	88.2	99.9
Grains	106.4	97.4	92.0	85.9	93.2	92.4	95.3	96.4	97.7	103.1
Livestock	108.1	115.6	107.9	112.8	100.7	101.1	100.9	96.6	97.7	100.0
Poultry, live	128.8	118.8	111.2	110.4	120.4	116.7	109.1	106.8	105.1	106.9
Fibers, plant & animal	107.8	117.8	115.1	115.2	106.7	103.5	96.3	90.3	89.7	85.4
Fluid milk	98.8	100.8	89.3	84.4	91.8	94.3	96.0	99.2	100.5	98.4
Oilseeds	123.8	112.1	106.4	109.6	104.2	107.0	102.1	102.9	103.0	104.3
Tobacco, leaf	93.8	95.8	100.4	—	96.5	104.1	103.5	98.3	104.8	102.2
Sugar, raw cane	115.5	119.2	114.3	116.1	114.1	114.4	114.2	114.3	113.5	112.5
All commodities	112.2	116.3	116.5	119.0	116.2	116.1	116.4	116.4	115.9	115.6
Industrial commodities	111.6	115.8	116.5	119.3	116.3	116.3	116.6	116.7	116.1	115.6
All foods 6/	117.8	123.2	122.2	122.7	121.4	120.7	121.1	121.1	120.2	120.4
Farm products & processed foods & feeds	115.4	118.6	116.4	117.0	115.2	115.1	115.0	114.8	114.5	115.3
Farm products	110.9	112.2	105.6	106.9	102.9	103.1	101.2	101.4	100.7	103.0
Processed foods & feeds 6/	117.8	121.9	121.9	122.1	121.4	121.1	122.0	121.5	121.4	121.4
Cereal & bakery products	131.1	134.2	138.1	135.3	138.3	138.6	139.7	141.0	141.9	142.7
Sugar & confectionery	120.1	123.1	128.4	126.3	129.4	129.8	128.5	128.7	128.7	129.3
Beverages	118.4	120.8	124.1	125.5	123.2	123.1	123.2	123.3	122.9	124.3

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). P = preliminary. R = revised. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1991						1992
	1989	1990	1991	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Market basket 1/										
Retail cost (1982-84=100)	124.6	133.5	137.4	137.9	136.8	136.6	135.9	136.6	137.2	137.8
Farm value (1982-84=100)	107.1	113.1	106.1	108.0	104.2	102.0	101.8	101.1	101.8	100.2
Farm-retail spread (1982-84=100)	134.1	144.6	154.2	153.5	154.3	155.2	154.4	155.7	156.4	158.0
Farm value-retail cost (%)	30.1	29.7	27.0	27.7	28.7	26.2	26.2	25.9	25.9	25.5
Meat products										
Retail cost (1982-84=100)	116.7	128.5	132.5	133.5	132.9	131.9	131.3	131.5	130.8	130.0
Farm value (1982-84=100)	103.6	116.8	110.0	114.5	108.6	102.9	103.3	98.1	97.8	97.0
Farm-retail spread (1982-84=100)	130.2	140.1	155.8	153.0	157.8	161.7	160.0	165.8	164.7	163.9
Farm value-retail cost (%)	44.9	46.0	42.0	43.4	41.4	39.5	39.8	37.8	37.9	37.8
Dairy products										
Retail cost (1982-84=100)	115.6	126.6	125.1	125.2	124.6	125.3	125.7	126.2	127.4	128.2
Farm value (1982-84=100)	99.1	101.7	90.0	86.1	90.5	92.1	95.9	98.2	101.9	98.6
Farm-retail spread (1982-84=100)	130.8	149.5	157.5	161.2	155.8	155.9	153.2	152.0	150.9	155.5
Farm value-retail cost (%)	41.1	38.5	34.5	33.0	34.9	35.3	36.6	37.3	38.4	36.9
Poultry										
Retail cost (1982-84=100)	132.7	132.6	131.5	131.3	132.4	131.0	131.0	129.3	130.2	131.2
Farm value (1982-84=100)	117.1	107.6	102.5	100.2	107.2	106.5	103.1	99.6	98.4	99.4
Farm-retail spread (1982-84=100)	150.6	161.1	164.9	167.1	161.4	159.3	163.1	163.5	166.8	167.8
Farm value-retail cost (%)	47.2	43.6	41.7	40.8	43.3	43.5	42.1	41.2	40.4	40.5
Eggs										
Retail cost (1982-84=100)	118.6	124.1	121.2	139.8	121.0	118.0	118.8	115.4	123.5	113.9
Farm value (1982-84=100)	107.5	108.0	100.9	126.6	95.4	93.7	95.0	94.5	108.8	83.5
Farm-retail spread (1982-84=100)	138.1	153.2	157.8	163.7	167.0	181.7	155.9	152.9	148.1	168.5
Farm value-retail cost (%)	58.3	55.9	53.5	58.1	50.6	51.0	52.3	52.8	57.1	47.1
Cereal & bakery products										
Retail cost (1982-84=100)	132.4	140.0	145.8	144.3	146.5	146.5	146.9	147.5	147.4	148.9
Farm value (1982-84=100)	101.7	90.5	85.3	78.9	83.0	87.2	90.8	91.8	95.8	97.4
Farm-retail spread (1982-84=100)	136.7	148.9	154.3	153.4	155.4	154.8	154.7	155.3	154.6	156.1
Farm value-retail cost (%)	9.4	7.9	7.2	6.7	6.9	7.3	7.6	7.8	8.0	8.0
Fresh fruits										
Retail cost (1982-84=100)	154.7	174.6	200.1	198.3	195.9	203.0	194.6	190.8	196.9	196.7
Farm value (1982-84=100)	108.5	128.3	174.4	211.0	184.0	178.0	145.4	150.8	144.1	132.8
Farm-retail spread (1982-84=100)	178.0	195.9	211.9	192.4	209.8	215.5	217.3	209.3	221.3	226.2
Farm value-retail cost (%)	22.2	23.2	27.5	33.6	26.7	27.4	23.6	25.0	23.1	21.3
Fresh vegetables										
Retail cost (1982-84=100)	143.1	151.1	154.4	159.9	142.2	137.6	134.0	149.6	150.7	152.7
Farm value (1982-84=100)	123.3	124.4	110.8	103.8	92.6	86.6	84.8	104.2	82.5	103.8
Farm-retail spread (1982-84=100)	153.2	164.9	176.8	188.7	167.7	163.8	159.3	173.0	185.7	177.8
Farm value-retail cost (%)	29.3	28.0	24.4	22.0	22.1	21.4	21.5	23.6	18.6	23.1
Processed fruits & vegetables										
Retail cost (1982-84=100)	125.0	132.7	130.2	131.5	129.8	129.8	129.8	129.7	129.7	132.9
Farm value (1982-84=100)	132.4	144.0	120.6	120.3	119.4	118.3	117.0	116.3	128.7	126.8
Farm-retail spread (1982-84=100)	122.7	129.1	133.2	135.0	133.0	133.4	133.5	133.9	130.0	134.8
Farm value-retail cost (%)	25.2	25.8	22.0	21.8	21.9	21.7	21.5	21.3	23.6	22.7
Fats & oils										
Retail cost (1982-84=100)	121.2	126.3	131.7	132.4	132.1	131.1	131.7	129.8	129.3	130.7
Farm value (1982-84=100)	95.6	107.1	98.0	103.3	94.5	95.2	92.4	90.4	91.0	90.7
Farm-retail spread (1982-84=100)	130.8	133.4	144.2	143.1	145.9	144.3	146.1	144.3	143.4	145.4
Farm value-retail cost (%)	21.2	22.8	20.0	21.0	19.2	19.5	18.9	18.7	18.9	18.7

	Annual			1991					1992	
	1989	1990	1991	Feb	Sept	Oct	Nov	Dec	Jan	Feb
Beef, Choice										
Retail price 2/ (cts./lb.)	265.7	281.0	288.3	292.5	280.1	277.2	281.0	279.4	278.7	282.5
Wholesale value 3/ (cts.)	176.8	189.6	182.5	189.6	170.8	174.5	175.1	171.8	176.6	184.6
Net farm value 4/ (cts.)	157.6	168.4	160.2	171.1	146.8	149.8	152.5	149.2	155.2	165.7
Farm-retail spread (cts.)	108.1	112.6	128.1	121.4	133.3	127.4	128.5	130.2	123.5	116.8
Wholesale-retail 5/ (cts.)	88.9	91.4	105.8	102.9	109.3	102.7	105.9	107.6	102.1	97.9
Farm-wholesale 6/ (cts.)	19.2	21.2	22.3	18.5	24.0	24.7	22.6	22.6	21.4	18.9
Farm value-retail price (%)	59	60	56	58	52	54	54	53	56	59
Pork										
Retail price 2/ (cets./lb.)	182.9	212.6	211.9	215.5	211.9	207.7	205.1	200.9	198.7	199.8
Wholesale value 3/ (cts.)	99.2	118.3	108.9	110.1	107.1	104.6	97.6	98.3	93.6	99.3
Net farm value 4/ (cts.)	70.4	87.2	78.4	83.1	74.7	69.4	60.6	62.1	59.2	64.9
Farm-retail spread (cts.)	112.5	125.4	133.5	132.4	137.2	138.3	144.5	138.8	139.5	134.9
Wholesale-retail 5/ (cts.)	83.7	94.3	103.0	105.4	104.8	103.1	107.5	102.6	105.1	100.5
Farm-wholesale 6/ (cts.)	28.8	31.1	30.5	27.0	32.4	35.2	37.0	36.2	34.4	34.4
Farm value-retail price (%)	38	41	37	39	35	33	30	31	30	32

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

Information contacts: Denis Dunham (202) 219-0870, Larry Dwyer (202) 219-0712.

Table 9.—Price Indexes of Food Marketing Costs

(See the March 1991 issue.)

Information contact: Denis Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
				Million pounds 4/			Pounds		
Beef									
1989	422	23,087	2,179	25,688	1,023	335	24,330	69.3	73.88
1990	335	22,743	2,356	25,434	1,006	397	24,031	67.8	78.56
1991	397	22,908	2,360	25,665	1,188	390	24,090	67.3	74.28
1992 F	419	23,434	2,310	26,163	1,350	325	24,488	67.8	71-77
Pork									
1989	437	15,813	896	17,146	282	313	16,571	52.0	44.03
1990	313	15,354	898	16,565	239	298	16,030	49.8	54.45
1991	296	16,002	778	17,074	290	393	16,421	50.5	48.88
1992 F	393	17,104	780	18,277	290	375	17,822	53.7	37-43
Veal 5/									
1989	5	355	0	360	0	4	356	1.2	91.84
1990	4	327	0	331	0	6	325	1.1	96.51
1991	6	307	0	313	0	6	307	1.0	99.95
1992 F	7	288	0	295	0	4	291	0.9	88-94
Lamb & mutton									
1989	8	347	63	416	2	8	408	1.5	57.32
1990	8	363	59	430	3	8	419	1.5	55.54
1991	8	364	60	432	3	6	423	1.5	53.21
1992 F	8	363	60	429	3	9	417	1.5	51-57
Total red meat									
1989	870	39,602	3,138	43,610	1,287	660	41,663	124.0	—
1990	660	38,787	3,313	42,760	1,248	707	40,805	120.1	—
1991	707	38,581	3,242	43,530	1,451	825	41,254	120.3	—
1992 F	825	41,189	3,150	45,164	1,633	713	42,818	124.0	—
Broilers									
1989	36	17,424	0	17,460	814	38	16,608	67.1	59.0
1990	38	18,660	0	18,698	1,143	26	17,529	70.1	54.8
1991	26	19,617	0	19,643	1,281	36	18,548	73.5	52.03
1992 F	36	20,748	0	20,784	1,200	35	19,549	76.8	47-53
Mature chicken									
1989	157	568	0	725	24	189	511	2.1	—
1990	189	588	0	777	25	224	528	2.1	—
1991	224	569	0	793	28	274	491	1.9	—
1992 F	274	585	0	859	28	230	601	2.4	—
Turkeys									
1989	250	4,285	0	4,535	41	236	4,259	17.2	68.7
1990	236	4,734	0	4,970	54	308	4,610	18.4	63.2
1991	306	4,851	0	5,157	103	264	4,790	19.0	61.24
1992 F	264	4,977	0	5,241	115	250	4,876	19.2	57-63
Total poultry									
1989	442	22,278	0	22,720	878	463	21,378	88.4	—
1990	463	23,982	0	24,445	1,222	557	22,866	90.7	—
1991	557	25,237	0	25,793	1,391	575	23,827	94.4	—
1992 F	575	28,310	0	28,885	1,343	515	25,027	98.3	—
Red meat & poultry									
1989	1,312	61,880	3,138	66,330	2,165	1,123	63,042	210.4	—
1990	1,123	62,769	3,313	67,205	2,470	1,264	63,471	210.8	—
1991	1,264	64,818	3,242	69,324	2,843	1,400	65,081	214.7	—
1992 F	1,400	67,499	3,150	72,049	2,976	1,228	67,845	222.3	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was 70.5) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Medium # 1, Nebraska Direct 1,100-1,300 lb.; pork: barrows & gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran, or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Pro- duc- tion	Im- ports	Total supply	Ex- ports	Hatch- ing use	Ending stocks	Consumption		
								Total	Per capita	Wholesale price*
Million dozen										
								No.	Cts./doz.	
1987	10.4	5,888.2	5.8	5,884.2	111.2	599.1	14.4	5,159.5	254.9	81.8
1988	14.4	5,784.2	5.3	5,803.9	141.8	605.9	15.2	5,041.0	248.8	82.1
1989	15.2	5,598.2	25.2	5,638.5	91.6	643.9	10.7	4,892.4	237.3	81.9
1990	10.7	5,865.3	9.1	5,885.0	100.5	677.1	11.6	4,895.8	235.0	82.2
1991	11.8	5,757.5	2.3	5,771.4	154.3	705.1	13.0	4,899.0	232.9	77.5
1992 F	13.0	5,790.0	2.4	5,805.4	150.0	740.0	12.0	4,903.4	231.2	70-76

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0787.

Table 12.—U.S. Milk Supply & Use

Production	Farm use	Commercial		Imports	Total commercial supply	CCC net removals	Commercial		All milk price 1/	CCC net removals		
		Farm market-ings	Beg. stock				Ending stocks	Disappearance		Skim solids basis	Total solids basis 2/	
		Billion pounds (milkfat basis)								Billion pounds		
1985	143.0	2.5	140.6	4.8	2.8	148.2	13.3	4.5	130.4	12.76	17.2	15.6
1986	143.1	2.4	140.7	4.5	2.7	147.9	10.8	4.1	133.0	12.51	14.3	12.9
1987	142.7	2.3	140.5	4.1	2.5	147.1	8.8	4.6	135.7	12.54	9.3	8.3
1988	145.2	2.2	142.9	4.6	2.4	149.9	9.1	4.3	138.5	12.26	5.5	6.9
1989	144.2	2.1	142.2	4.3	2.5	149.0	9.4	4.1	135.5	13.58	0.4	4.0
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	139.0	13.73	1.6	4.6
1991	148.5	2.0	146.5	5.1	2.6	154.3	10.5	4.5	139.3	12.23	4.0	6.6
1992	149.2	2.1	147.1	4.5	2.6	154.2	7.5	4.5	142.2	12.60	2.5	4.5

1/ Delivered to plants & dealers; does not reflect deductions. 2/ Arbitrarily weighted average of milkfat basis (40 percent) & skim solids basis (60 percent). F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

	Annual			1991						1992
	1989	1990	1991	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Broilers										
Federally inspected slaughter, certified (mil. lb.)	17,334.2	18,553.9	19,095.6	1,887.6	1,758.2	1,585.3	1,825.7	1,496.3	1,586.3	1,794.0
Wholesale price, 12-city (cts./lb.)	59.0	54.8	52.0	51.7	54.6	53.6	51.6	60.3	49.5	50.1
Price of grower feed (\$/ton)	237	218	208	213	202	201	207	211	207	207
Broiler-feed price ratio 1/	3.0	3.0	2.7	2.9	3.2	3.2	3.0	2.8	2.8	2.9
Stocks beginning of period (mil. lb.)	35.9	38.3	26.1	26.1	45.9	41.4	41.5	39.5	38.8	36.1
Broiler-type chicks hatched (mil.) 2/	5,948.9	6,314.6	6,570.1	543.9	558.5	532.8	527.5	508.0	599.7	575.2
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	4,174.8	4,560.9	4,872.3	368.7	424.2	405.9	483.6	418.6	348.1	382.3
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	66.7	63.2	61.2	53.5	64.7	64.4	60.5	63.1	65.2	54.7
Price of turkey grower feed (\$/ton)	251.0	238	235	234	226	230	243	242	241	241
Turkey-feed price ratio 1/	3.2	3.2	3.3	2.9	3.6	3.5	3.2	3.3	3.4	3.1
Stocks beginning of period (mil. lb.)	249.7	235.9	306.4	306.4	671.3	825.8	667.2	653.0	305.5	264.1
Poulters placed in U.S. (mil.)	290.7	304.9	308.0	25.9	25.6	21.1	22.1	22.2	24.4	25.7
Eggs										
Farm production (mil.)	57,178	57,983	60,090	5,855	5,824	5,651	5,898	5,789	6,007	5,908
Average number of layers (mil.)	269	270	274	274	272	274	276	277	279	278
Rate of lay (eggs per layer on farms)	249.5	251.7	252.4	21.4	21.4	20.7	21.4	20.9	21.5	21.2
Cartoned price, New York, grade A large (cts./doz.) 3/	81.9	82.2	77.5	87.5	78.3	78.5	74.5	75.8	80.0	66.6
Price of laying feed (\$/ton)	209	200	195	198	188	188	199	200	199	201
Egg-feed price ratio 1/	6.7	7.0	8.0	8.0	8.8	8.7	8.4	8.4	7.2	5.8
Stocks, first of month										
Shell (mil. doz.)	0.27	0.36	0.45	0.45	0.39	0.30	0.39	0.48	0.36	0.63
Frozen (mil. doz.)	14.9	10.3	11.2	11.2	13.7	12.4	12.5	12.7	11.5	12.3
Replacement chicks hatched (mil.)	383	399	418	33.1	33.3	33.9	33.7	30.3	32.7	32.5

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0787.

Table 14.—Dairy

	Annual			1991							1992
	1989	1990	1991	Jan	Aug	Sept	Oct	Nov	Dec	Jan	
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.37	12.21	11.05	10.18	11.50	12.02	12.50	12.48	12.10	11.71	
Wholesale prices											
Butter, grade A Chl. (cts./lb.)	127.9	102.1	99.3	97.2	98.9	100.7	108.2	104.6	98.4	94.9	
Am. cheese, Wls. assembly pt. (cts./lb.)	138.8	136.7	124.4	111.4	136.1	139.7	140.2	135.8	130.2	125.3	
Nonfat dry milk (cts./lb.) 2/	105.6	100.8	94.0	85.2	92.2	93.9	114.8	110.7	108.5	95.3	
USDA net removals 3/											
Total milk equiv. (mil. lb.) 4/	9,357.0	8,951.2	10,478	340.3	49.3	38.9	137.5	564.4	758.1	2,128.2	
Butter (mil. lb.)	413.4	400.3	442.4	77.5	1.7	1.4	5.8	25.0	33.8	98.3	
Am. cheese (mil. lb.)	37.4	21.5	81.8	15.6	1.1	.4	1.1	1.1	1.5	2.6	
Nonfat dry milk (mil. lb.)	0	117.8	264.8	55.4	2.8	3.6	8.9	11.0	10.1	9.6	
Milk											
Milk prod. 21 States (mil. lb.)	122,509	125,772	126,683	10,645	10,352	9,927	10,212	9,928	10,418	10,659	
Milk per cow (lb.)	14,389	14,778	14,977	1,251	1,239	1,189	1,224	1,192	1,252	1,283	
Number of milk cows (1,000)	8,528	8,512	8,392	8,510	8,357	8,350	8,346	8,329	8,322	8,305	
U.S. milk production (mil. lb.)	144,239	148,319	148,535	7/ 12,587	7/ 12,208	7/ 11,707	7/ 12,102	7/ 11,763	7/ 12,346	7/ 12,603	
Stock, beginning											
Total (mil. lb.)	8,379	9,038	13,359	13,359	19,302	18,483	17,849	18,802	15,886	15,841	
Commercial (mil. lb.)	4,256	4,120	5,146	5,146	6,062	6,470	5,243	4,840	4,257	4,481	
Government (mil. lb.)	4,122	4,918	8,213	8,213	13,240	13,014	12,405	11,963	11,629	11,379	
Imports, total (mil. lb.) 3/	2,499	2,690	2,629	163	231	224	261	258	287	—	
Commercial disappearance (mil. lb.)	135,439	138,984	139,326	10,041	12,808	11,950	12,855	11,670	11,499	—	
Butter											
Production (mil. lb.)	1,295.4	1,302.2	1,380.3	142.1	85.0	84.7	105.2	108.5	130.1	158.0	
Stocks, beginning (mil. lb.)	214.7	258.2	418.1	416.1	659.8	829.4	597.2	567.1	543.0	539.4	
Commercial disappearance (mil. lb.)	876.0	916.2	926.6	44.6	106.6	85.8	106.0	91.5	90.5	—	
American cheese											
Production (mil. lb.)	2,674.1	2,890.8	2,778.9	247.1	224.6	205.8	221.8	214.9	246.1	245.6	
Stocks, beginning (mil. lb.)	293.0	236.2	347.4	347.4	404.0	393.3	376.0	338.7	320.3	318.7	
Commercial disappearance (mil. lb.)	2,683.1	2,781.0	2,759.9	214.0	232.3	223.9	255.1	231.8	245.3	—	
Other cheese											
Production (mil. lb.)	2,941.3	3,170.4	3,229.3	254.6	269.2	270.7	288.3	282.1	292.0	268.6	
Stocks, beginning (mil. lb.)	104.7	93.2	110.8	110.8	108.7	102.0	103.9	91.6	89.8	97.5	
Commercial disappearance (mil. lb.)	3,208.9	3,429.8	3,617.4	266.0	301.2	292.7	328.4	311.8	316.1	—	
Nonfat dry milk											
Production (mil. lb.)	874.7	876.8	879.0	82.8	56.8	44.5	48.9	54.1	81.7	80.2	
Stocks, beginning (mil. lb.)	53.1	49.5	161.9	161.9	349.7	337.6	302.8	277.7	225.9	214.8	
Commercial disappearance (mil. lb.)	873.0	895.0	889.1	35.8	55.4	61.1	49.2	45.9	47.6	—	
Frozen dessert											
Production (mil. gal.) 5/	1,214.0	1,162.9	1,193.0	78.9	118.1	98.4	92.0	78.1	76.5	83.2	
	Annual			1990				1991			
	1989	1990	1991	II	III	IV	I	II	III	IV P	
Milk production (mil. lb.)	144,239	148,319	148,535	38,640	38,611	38,307	37,425	38,833	38,285	38,211	
Milk per cow (lb.)	14,244	14,846	14,888	3,822	3,818	3,577	3,705	3,864	3,648	3,650	
No. of milk cows (1,000)	10,126	10,127	9,990	10,109	10,118	10,151	10,101	9,999	9,940	9,918	
Milk-feed price ratio 5/	1.85	1.71	1.58	1.89	1.74	1.57	1.49	1.47	1.59	1.77	
Returns over concentrate & costs (\$/cwt milk)	10.18	10.39	9.00	10.00	10.50	9.03	8.30	8.10	9.00	10.50	

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Includes products exported through the Dairy Export Incentive Program (DEIP).
 4/ Milk equivalent, fat basis. 5/ Hard ice cream, ice milk, & hard sherbet. 6/ Based on average milk price after adjustment for price support deductions.
 7/ Estimated. P = preliminary. — = not available.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1990		1991			
	1989	1990	1991	III	IV	I	II	III	IV
U.S. wool price, (cts./lb.) 1/	370	258	199	238	227	197	200	217	182
Imported wool price, (cts./lb.) 2/	354	287	187	281	270	235	199	194	222
U.S. mill consumption, scoured									
Apparel wool (1,000 lb.)	120,534	120,822	143,519	26,888	30,497	33,320	38,091	35,910	35,588
Carpet wool (1,000 lb.)	14,122	12,124	14,363	3,125	2,138	3,088	3,119	4,564	3,592

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. — = not available.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1991						1992
	1989	1990	1991 ¹	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Cattle on feed (7 States)										
Number on feed (1,000 head) 1/	8,045	8,378	8,992	8,992	7,388	7,064	7,216	8,013	8,477	8,397
Placed on feed (1,000 head)	20,834	21,030	19,708	1,721	1,459	1,826	2,539	1,917	1,456	1,565
Marketings (1,000 head)	19,422	19,198	18,066	1,632	1,716	1,598	1,665	1,376	1,443	1,660
Other disappearance (1,000 head)	1,079	1,218	1,230	118	67	76	77	77	93	99
Beef steer-corn price ratio.										
Omaha 2/	30.3	32.8	31.6	35.3	28.5	28.8	29.9	30.5	29.7	29.9
Hog-corn price ratio, Omaha 2/	18.4	23.1	21.1	23.0	21.8	19.9	18.9	16.5	16.8	15.7
Market prices (\$/cwt)										
Slaughter cattle										
Choice steers, Omaha 1,000-1,100 lb.	72.52	77.40	73.83	78.95	67.25	67.20	68.91	69.90	68.84	71.20
Choice steers, Neb. Direct, 1,100-1,300 lb.	73.86	78.56	74.28	79.45	67.24	68.07	69.79	71.02	69.07	72.55
Boning utility cows, Sioux Falls	48.98	53.60	50.31	49.41	50.08	49.77	47.83	43.77	47.22	43.53
Feeder cattle										
Medium no. 1, Oklahoma City 600-700 lb.	86.66	92.15	92.74	94.21	90.06	89.74	88.60	86.60	83.08	82.41
Slaughter hogs										
Barrows & gilts, 6-markets	44.03	54.45	48.86	51.00	50.78	46.53	43.16	37.82	38.55	36.91
Feeder pigs										
S. Mo. 40-60 lb. (per head)	33.63	51.46	39.84	43.44	36.53	38.22	33.75	30.22	28.17	27.18
Slaughter sheep & lambs										
Lambs, Choice, San Angelo	67.32	55.54	52.73	47.63	54.31	53.25	51.20	52.08	64.92	58.81
Ewes, Good, San Angelo	38.58	35.21	31.98	31.94	31.06	29.83	28.80	30.75	32.92	38.88
Feeder lambs										
Choice, San Angelo	79.85	62.95	53.27	50.63	53.38	52.83	51.70	52.75	64.75	62.00
Wholesale meat prices, Midwest										
Boxed beef cut-out value	114.78	123.21	118.31	125.04	111.54	110.61	113.04	113.43	111.18	114.38
Canner & cutter cow beef	94.43	99.98	99.44	95.44	101.23	99.89	96.16	91.08	93.02	92.87
Pork loins, 14-18 lb. 3/	101.09	117.52	108.39	107.67	117.54	105.85	100.87	88.83	90.19	96.89
Pork bellies, 12-14 lb.	34.14	53.80	47.79	64.11	42.01	38.87	32.26	30.04	28.79	28.05
Hams, skinned, 14-17 lb.	69.39	87.70	81.80	73.00	85.00	85.00	87.25	81.00	84.00	—
All fresh beef retail price 4/	238.97	254.99	262.12	261.30	261.58	258.23	259.12	261.46	261.66	257.55
Commercial slaughter (1,000 head)*										
Cattle	33,917	33,242	32,667	2,881	2,906	2,703	2,933	2,579	2,582	2,927
Steers	18,539	18,587	18,732	1,416	1,543	1,386	1,465	1,284	1,299	1,450
Heifers	10,406	10,090	9,719	858	893	852	882	736	700	877
Cows	6,316	5,920	5,623	557	415	414	525	531	519	551
Bulls & stags	657	644	614	50	55	51	61	48	44	49
Calves	2,172	1,789	1,442	154	112	119	131	128	134	131
Sheep & lambs	5,465	5,854	5,714	508	458	477	523	487	480	484
Hogs	88,691	85,135	88,163	7,652	7,279	7,359	8,498	7,941	7,926	9,343
Commercial production (mil. lb.)										
Beef	22,974	22,634	22,799	1,968	2,077	1,939	2,115	1,813	1,782	2,039
Veal	344	316	296	31	22	24	27	26	27	28
Lamb & mutton	341	357	359	33	27	29	32	29	31	31
Pork	15,759	15,299	15,948	1,396	1,299	1,315	1,534	1,456	1,444	1,524
	Annual			1990		1991				1992
	1989	1990	1991	III	IV	I	II	III	IV	I
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	9,688	9,943	10,827	8,781	9,062	10,827	10,739	9,461	8,620	10,137
Placed on feed (1,000 head)	24,469	24,803	23,212	6,358	7,401	5,702	5,006	5,414	7,090	—
Marketings (1,000 head)	22,940	22,526	22,388	5,796	5,289	5,328	5,820	5,973	5,267	*5,443
Other disappearance (1,000 head)	1,274	1,393	1,514	261	347	462	484	282	306	—
Hogs & pigs (10 States) 5/										
Inventory (1,000 head) 1/	43,210	42,200	42,900	42,630	44,120	42,900	41,990	44,520	46,900	45,055
Breeding (1,000 head) 1/	5,335	5,275	5,257	5,405	5,300	5,257	5,450	5,720	5,675	5,580
Market (1,000 head) 1/	37,875	36,925	37,643	37,225	38,820	37,643	36,540	38,800	41,225	39,475
Farrowings (1,000 head)	9,203	8,960	9,479	2,236	2,236	2,129	2,586	2,441	2,323	*2,298
Pig crop (1,000 head)	71,807	70,589	75,035	17,684	17,459	16,770	20,632	19,278	18,355	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8-14 lb.; 1984 & 1985, 14-17 lb.; beginning 1986, 14-18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), & Sept.-Nov. (IV). * Classes estimated. May not add to NASS totals due to rounding. — = not available.

Information contact: Polly Cochran (202) 219-0767.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area		Harvested	Yield	Production	Total supply ^{4/}	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm Price ^{5/}
	Set aside ^{3/}	Planted										
	Mil. acres		Bu./acre		Mil. bu.		Mil. bu.					\$/bu.
Wheat												
1986/87	21.0	72.0	50.7	34.4	2,091	4,017	401	796	999	2,196	1,821	2.42
1987/88	23.9	65.8	55.9	37.7	2,108	3,945	280	806	1,598	2,684	1,261	2.57
1988/89	22.5	65.5	53.2	34.1	1,812	3,096	146	829	1,419	2,394	702	3.72
1989/90*	9.6	76.6	62.2	32.7	2,037	2,762	139	853	1,233	2,225	536	3.72
1990/91*	7.5	77.2	60.3	39.5	2,736	3,309	489	886	1,068	2,443	866	2.61
1991/92*	15.4	80.9	57.7	34.3	1,981	2,882	350	867	1,275	2,492	390	3.00-3.10
Rice												
	Mil. acres		Lb./acre		Mil. cwt (rough equiv.)							\$/cwt
1986/87	1.48	2.38	2.36	5,651	133.4	213.3	—	6/ 77.7	84.2	161.9	51.4	3.76
1987/88	1.57	2.36	2.33	5,555	129.6	184.0	—	6/ 80.4	72.2	152.6	31.4	7.27
1988/89	1.09	2.93	2.90	5,514	159.9	195.1	—	6/ 82.6	85.9	168.4	26.7	6.83
1989/90*	1.18	2.73	2.69	5,749	184.5	185.6	—	6/ 82.1	77.2	159.3	26.3	7.35
1990/91*	1.04	2.90	2.82	5,529	156.1	167.2	—	6/ 81.7	70.9	162.6	24.6	6.70
1991/92*	0.65	2.86	2.75	5,617	184.5	185.0	—	6/ 95.3	60.0	155.3	29.7	7.20-7.50
Corn												
	Mil. acres		Bu./acre		Mil. bu.							\$/bu.
1986/87	14.3	76.6	68.9	119.4	8,226	12,267	4,699	1,224	1,492	7,395	4,882	1.50
1987/88	23.1	66.2	59.5	119.8	7,131	12,016	4,798	1,243	1,718	7,767	4,259	1.94
1988/89	20.6	67.7	58.3	84.8	4,929	9,191	3,941	1,293	2,026	7,290	1,630	2.64
1989/90*	10.8	72.2	64.7	118.3	7,525	9,458	4,389	1,356	2,368	8,113	1,344	2.96
1990/91*	10.7	74.2	67.0	118.5	7,834	9,282	4,699	1,367	1,725	7,761	1,621	2.28
1991/92*	7.4	76.0	66.8	108.6	7,474	9,018	5,000	1,400	1,525	7,925	1,091	2.30-2.60
Sorghum												
	Mil. acres		Bu./acre		Mil. bu.							\$/bu.
1986/87	2.9	15.3	13.9	67.7	939	1,490	536	12	198	748	743	1.37
1987/88	4.1	11.8	10.5	69.4	731	1,474	555	25	232	812	663	1.70
1988/89	3.9	10.3	9.0	63.8	577	1,239	486	22	312	800	440	2.27
1989/90*	3.3	12.6	11.1	55.4	615	1,055	618	15	303	835	220	2.10
1990/91*	3.3	10.5	9.1	63.1	673	793	405	14	232	651	143	2.12
1991/92*	2.3	11.0	9.8	59.0	579	722	390	16	200	606	117	2.25-2.66
Barley												
	Mil. acres		Bu./acre		Mil. bu.							\$/bu.
1986/87	2.0	13.0	12.0	50.8	609	942	298	175	134	606	338	1.61
1987/88	2.9	10.9	10.0	62.4	521	869	253	174	121	548	321	1.81
1988/89	2.8	9.8	7.6	38.0	290	622	171	175	79	426	196	2.80
1989/90*	2.3	9.1	8.3	48.6	404	614	193	176	84	453	161	2.42
1990/91*	2.9	8.2	7.6	66.1	422	596	205	178	81	461	135	2.14
1991/92*	2.1	8.9	8.4	55.2	464	620	215	176	86	475	145	2.05-2.16
Oats												
	Mil. acres		Bu./acre		Mil. bu.							\$/bu.
1986/87	0.5	14.7	6.8	56.3	385	601	385	83	1	468	133	1.21
1987/88	0.8	17.9	6.9	54.3	374	552	358	81	1	440	112	1.56
1988/89	0.3	13.9	5.5	39.3	218	393	194	100	1	294	98	2.61
1989/90*	0.4	12.1	6.9	64.3	374	538	266	116	1	381	167	1.49
1990/91*	0.2	10.4	5.9	60.1	358	578	286	120	1	407	171	1.14
1991/92*	0.5	8.6	4.8	50.6	243	474	245	125	1	371	103	1.15-1.25
Soybeans												
	Mil. acres		Bu./acre		Mil. bu.							\$/bu.
1986/87	0	60.4	58.3	33.3	1,943	2,479	7/ 106	1,179	757	2,042	436	4.78
1987/88	0	58.2	57.2	33.9	1,938	2,375	7/ 97	1,174	802	2,073	302	5.88
1988/89	0	58.8	57.4	27.0	1,549	1,855	7/ 88	1,056	527	1,673	182	7.42
1989/90*	0	60.8	59.5	32.3	1,924	2,109	7/ 101	1,146	623	1,870	239	5.69
1990/91*	0	57.8	56.5	34.0	1,926	2,167	7/ 94	1,187	557	1,838	329	5.75
1991/92*	0	59.1	58.0	34.3	1,988	2,320	7/ 95	1,235	665	1,995	325	5.35-5.85
Soybean oil												
					Mil. lbs.							\$/ Cts./lb.
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	16.40
1987/88	—	—	—	—	12,974	14,895	—	10,930	1,873	12,803	2,092	22.67
1988/89	—	—	—	—	11,737	13,987	—	10,591	1,661	12,252	1,715	21.10
1989/90*	—	—	—	—	13,004	14,741	—	12,083	1,353	13,436	1,305	22.30
1990/91*	—	—	—	—	13,408	14,730	—	12,184	780	12,964	1,786	21.00
1991/92*	—	—	—	—	13,955	16,760	—	12,300	1,260	13,550	2,200	18.0-21.0
Soybean meal												
					1,000 tons							\$/ \$/ton
1986/87	—	—	—	—	27,756	27,970	—	20,387	7,343	27,730	240	163
1987/88	—	—	—	—	28,090	28,300	—	21,293	6,854	28,147	153	222
1988/89	—	—	—	—	24,943	25,100	—	19,489	6,445	24,927	173	233
1989/90*	—	—	—	—	27,719	27,900	—	22,283	5,319	27,582	318	174
1990/91*	—	—	—	—	26,325	28,666	—	22,912	5,489	28,381	285	170
1991/92*	—	—	—	—	29,210	29,500	—	22,900	6,350	29,250	250	165-180

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area		Harvested	Yield	Production	Total supply ^{4/}	Feed and residual	Other domestic use	Exports	Total use	Ending Stocks	Farm price ^{5/}
	Set Aside ^{3/}	Planted										
	Mil. acres		Lb./acre		Mil. bales							
Cotton 10/												
1986/87	4.2	10.0	8.6	552	9.7	19.1	—	7.6	8.7	14.1	5.0	52.40
1987/88	4.0	10.4	10.0	709	14.8	19.8	—	7.6	8.6	14.2	5.8	54.30
1988/89	2.2	12.5	11.9	819	16.4	21.2	—	7.8	6.1	13.9	7.1	56.60
1989/90*	3.6	10.6	9.5	814	12.2	19.3	—	8.8	7.7	16.5	3.0	66.20
1990/91*	2.0	12.3	11.7	834	16.5	18.5	—	8.7	7.8	16.5	2.3	68.20
1991/92*	0.9	14.1	12.8	856	17.6	19.9	—	9.3	8.8	18.1	3.9	11/ 63.20

* March 11, 1992 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats, August 1 for cotton & rice, September 1 for soybeans, corn, & sorghum, October 1 for soybean meal & soyoil. 2/ Conversion factors: Hectare (ha.) = 2.471 acre, 1 metric ton = 2204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt of rice, & 4.59 480-pound bales of cotton. 3/ Includes diversion, acreage reduction, 50-92, & 0-92 programs. 0/92 & 50/92 set-aside includes idled acreage & acreage planted to minor oilseeds. Data for 1991/92 are preliminary. 4/ Includes imports. 5/ Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Simple average of crude soybean oil, Decatur. 9/ Simple average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. 11/ Weighted average for August-November; not a projection for the marketing year. — = not available or not applicable.

Information contact: Commodity Economics Division, Crops Branch (202) 219-0840.

Table 18.—Cash Prices, Selected U.S. Commodities

	Marketing year 1/				1991					1992
	1987/88	1988/89	1989/90	1990/91	Jan	Sept	Oct	Nov	Dec	Jan
Wheat, No. 1 HRW, Kansas City (\$/bu.) 2/	2.96	4.17	4.22	2.94	2.71	3.31	3.64	3.76	4.06	4.66
Wheat, DNS, Minneapolis (\$/bu.) 3/	3.15	4.36	4.16	3.06	2.83	3.21	3.68	3.78	4.11	4.36
Rice, S.W. La. (\$/cwt) 4/	19.25	14.85	15.55	15.25	14.15	16.50	16.60	17.10	17.30	17.30
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	2.14	2.88	2.54	2.40	2.39	2.48	2.50	2.46	2.50	2.50
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	3.40	4.17	4.21	4.08	4.12	4.24	4.30	4.27	4.35	4.44
Barley, feed, Duluth (\$/bu.) 5/	1.78	2.32	2.20	2.13	2.09	2.08	2.18	2.23	2.18	2.20
Barley, malting, Minneapolis (\$/bu.)	2.04	4.11	3.28	2.42	2.33	2.21	2.38	2.50	2.54	2.51
U.S. price, SLM, 1-1/16 in. (cts./lb.) 6/	63.1	57.7	60.8	74.8	70.5	62.4	58.3	54.7	53.9	51.5
Northern Europe price index (cts./lb.) 7/	72.3	66.4	82.3	82.9	83.4	66.9	67.6	63.0	61.6	69.3
U.S. M 1-3/32 in. (cts./lb.) 8/	76.3	69.2	83.6	88.2	85.5	73.1	70.3	65.4	64.3	61.5
Soybeans, no. 1 yellow, 30 day, Chicago (\$/bu.)	6.67	7.41	6.88	5.76	5.83	6.90	6.88	5.56	5.54	5.66
Soybean oil, crude, Decatur (cts./lb.)	22.70	21.10	22.30	20.46	21.56	20.50	19.57	18.78	21.55	18.77
Soybean meal, 44% protein, Decatur (\$/ton)	221.90	233.50	173.75	169.78	155.00	191.90	183.00	178.00	170.70	172.70

1/ Beginning June 1 for wheat & barley; Aug. 1 for rice & cotton; Sept. 1 for corn, sorghum & soybeans; Oct. 1 for soybean meal & oil. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Beginning Mar. 1987 reporting point changed from Minneapolis to Duluth. 6/ Average spot market. 7/ Liverpool Cotton (A) Index; average of five lowest prices of 12 selected growths. 8/ Memphis territory growths.

Information contact: Joy Harwood (202) 219-0840.

Table 19.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Basic loan rate	Findley or announced loan rate 1/	Payment rates			Effective base acres 2/	Program 3/	Participation rate 4/
				Total deficiency	Paid land diversion				
					Mandatory	Optional			
				\$/bu.			Mill. acres	Percent of base	Percent of base
Wheat									
1986/87 5/	4.38	3.00	2.40	1.98	1.10	2.00	91.6	22.5/2 5/5-10	85
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.76	2.21	0.89	—	—	84.8	27.5/0/0	86
1989/90	4.10	2.58	2.06	0.32	—	—	82.3	10/0/0	78
1990/91 6/	4.00	2.44	1.95	1.28	—	—	80.5	7/ 5/0/0	83
1991/92	4.00	2.52	2.04	*1.35	—	—	79.3	15/0/0	85
1992/93	4.00	2.58	2.21	**0.65	—	—	—	5/0/0	—
Rice				\$/cwt					
1986/87 5/	11.90	7.20	8/ 3.94	4.70	—	—	4.2	35/0/0	94
1987/88	11.66	6.84	6/ 5.79	4.82	—	—	4.2	35/0/0	96
1988/89	11.15	6.63	8/ 6.21	4.31	—	—	4.2	25/0/0	94
1989/90	10.80	6.50	8/ 5.71	3.56	—	—	4.2	25/0/0	94
1990/91 6/	10.71	6.50	8/ 5.08	4.21	—	—	4.2	20/0/0	95
1991/92	10.71	6.50	—	3.07	—	—	4.2	5/0/0	95
1992/93	10.71	6.50	—	**3.51	—	—	—	0/0/0	—
Corn				\$/bu.					
1986/87 5/	3.03	2.40	1.92	1.11	0.73	—	81.7	17.5/2 5/0	86
1987/88	3.03	2.28	1.82	1.09	—	2.00	81.5	20/0/15	91
1988/89	2.93	2.21	1.77	0.38	—	1.75	82.9	20/0/10	87
1989/90	2.84	2.06	1.65	0.58	—	—	82.7	10/0/0	80
1990/91 6/	2.75	1.96	1.57	0.53	—	—	82.6	10/0/0	77
1991/92	2.75	1.89	1.82	*0.41	—	—	82.9	7.5/0/0	77
1992/93	2.75	2.01	1.72	**0.48	—	—	—	5/0/0	—
Sorghum				\$/bu.					
1986/87 5/	2.88	2.28	1.82	1.06	0.65	—	19.0	9/ 17.5/2 5/0	74
1987/88	2.88	2.17	1.74	1.14	—	1.90	17.4	20/0/15	85
1988/89	2.78	2.10	1.68	0.48	—	1.85	16.8	20/0/10	82
1989/90	2.70	1.96	1.57	0.66	—	—	16.2	10/0/0	71
1990/91 6/	2.61	1.86	1.49	0.58	—	—	15.4	10/0/0	70
1991/92	2.61	1.80	1.54	*0.37	—	—	13.5	7.5/0/0	77
1992/93	2.61	1.91	1.63	**0.46	—	—	—	5/0/0	—
Barley				\$/bu.					
1986/87 5/	2.80	1.85	1.56	0.99	0.57	—	12.4	9/ 17.5/2 5/0	72
1987/88	2.80	1.86	1.49	0.79	—	1.80	12.5	20/0/15	85
1988/89	2.51	1.80	1.44	0.00	—	1.40	12.4	20/0/10	79
1989/90	2.43	1.68	1.34	0.00	—	—	12.3	10/0/0	67
1990/91 6/	2.36	1.60	1.28	0.22	—	—	11.9	10/0/0	68
1991/92	2.36	1.54	1.32	*0.62	—	—	11.5	7.5/0/0	78
1992/93	2.36	1.64	1.40	**0.35	—	—	—	5/0/0	—
Oats				\$/bu.					
1986/87 5/	1.60	1.23	0.99	0.39	0.36	—	9.2	9/ 17.5/2 5/0	38
1987/88	1.60	1.17	0.94	0.20	—	0.80	8.4	20/0/15	45
1988/89	1.55	1.14	0.90	0.00	—	—	7.9	5/0/0	30
1989/90	1.50	1.06	0.85	0.00	—	—	7.6	5/0/0	18
1990/91 6/	1.45	1.01	0.81	0.33	—	—	7.5	5/0/0	09
1991/92	1.45	0.97	0.83	*0.35	—	—	7.3	0/0/0	38
1992/93	1.45	1.03	0.88	**0.15	—	—	—	0/0/0	—
Soybeans 10/				\$/bu.					
1986/87 5/	—	—	4.77	—	—	—	—	—	—
1987/88	—	—	4.77	—	—	—	—	—	—
1988/89	—	—	4.77	—	—	—	—	—	—
1989/90	—	—	4.53	—	—	—	—	11/ 10/25	—
1990/91 6/	—	—	4.50	—	—	—	—	11/ 0/25	—
1991/92	—	—	5.02	—	—	—	—	11/ 0/25	—
1992/93	—	—	5.02	—	—	—	—	11/ 0/25	—
Upland cotton				Cts./lb.					
1986/87 5/	81.0	55.00	12/ 44.00	28.00	—	—	15.5	25/0/0	92
1987/88	79.4	52.25	13/ 60.00	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	13/ 51.80	19.4	—	—	14.5	12.5/0/0	89
1989/90	73.4	50.00	13/ 65.05	13.1	—	—	14.6	25/0/0	89
1990/91 6/	72.9	50.27	13/ 53.00	7.3	—	—	14.4	12.5/0/0	86
1991/92 14/	72.9	50.77	13/ —	10.1	—	—	14.6	5/0/0	84
1992/93	72.9	52.35	13/ —	**15.0	—	—	—	10/0/0	—

1/ There are no Findley loan rates for rice or cotton. See footnotes 8/, 12/, & 13/. 2/ National effective crop acreage base as determined by ASCS. Net of CRP. 3/ Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4/ Percentage of effective base acres enrolled in acreage reduction programs. 5/ Payments & loans received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Payments & loans were reduced by 1.4 percent in 1990/91 due to Gramm-Rudman-Hollings. Budget Reconciliation Act reductions to deficiency payment rates were also in effect in that year. Data do not include these reductions. 7/ Under 1990 modified contracts, participating producers plant up to 105 percent of their wheat base acres. For every acre planted above 95 percent of base, the acreage used to compute deficiency payments was cut by 1 acre. 8/ A marketing loan has been in effect for rice since 1985/86. Loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly). However, loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to annual average adjusted world prices. 9/ The sorghum, oats, & barley programs are the same as for corn except as indicated. 10/ There are no target prices, base acres, acreage reduction programs, or deficiency payment rates for soybeans. 11/ Nominal percentage of program crop base acres permitted to shift into soybeans without loss of base. 12/ A marketing loan has been in effect for cotton since 1988/87. The loan repayment rate was fixed at 80 percent of the loan rate in 1986/87 (Plan A). 13/ In 1987/88 & after, loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly; Plan B). Starting in 1991/92, loans cannot be repaid at less than 70 percent of the loan rate. Data refer to annual average adjusted world prices. 14/ A marketing certificate program was implemented on Aug. 1, 1991. — = not available.

* For wheat & feed grains, the 1991/92 rate is the regular (5-month) deficiency payment rate. For the winter wheat option, the 5-month rate is \$1.25. For upland cotton & rice, the rate is the total payment rate. ** Estimated total deficiency payment rate. Minimum guaranteed payment rate for 0/92 (wheat & feed grains) & 50/92 (rice & upland cotton) programs.

Information contact: Joy Harwood (202) 219-0840.

Table 20.—Fruit

	1983	1984	1985	1986	1987	1988	1989	1990 P	1991
Citrus 1/									
Production (1,000 ton)	13,882	10,832	10,525	11,058	11,993	12,781	13,188	10,860	11,814
Per capita consumpt. (lbs.) 2/	29.5	24.0	22.6	26.0	25.8	26.4	25.4	22.4	—
Noncitrus 3/									
Production (1,000 tons)	14,168	14,301	14,191	13,874	16,011	15,693	18,385	15,655	15,504
Per capita consumpt. (lbs.) 2/	63.6	67.7	66.7	69.8	75.4	72.7	74.3	69.8	—
1991									
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
F.o.b. shipping point prices									
Apples (\$/carton) 4/	14.00	14.00	14.00	14.00	19.20	14.00	14.00	14.00	13.73
Pears (\$/box) 5/	15.12	18.90	—	—	13.00	13.00	13.00	13.00	12.50
Grower prices									
Oranges (\$/box) 6/	7.95	21.35	19.48	20.81	21.97	11.09	5.19	6.31	5.93
Grapefruit (\$/box) 6/	4.91	5.44	4.82	2.86	1.38	6.24	8.16	5.95	5.92
Stocks, ending									
Fresh apples (mil. lbs.)	690.7	385.8	163.0	17.7	2,723.6	5,133.7	4,481.5	3,703.8	2,980.5
Fresh pears (mil. lbs.)	14.7	—	12.8	137.5	456.3	420.8	335.4	217.2	181.5
Frozen fruits (mil. lbs.)	549.8	590.6	762.6	833.2	871.6	1,027.9	983.4	892.4	805.4
Frozen orange juice (mil. lbs.)	1,304.7	1,110.6	967.7	876.9	765.2	584.2	617.3	952.7	1,099.5

1/ 1990 indicated 1989/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynnie Napper (202) 219-0884.

Table 21.—Vegetables

	Calendar year									
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
Production										
Total vegetables (1,000 cwt)	430,795	403,509	456,334	453,030	448,629	478,381	488,779	542,437	561,704	565,373
Fresh (1,000 cwt) 1/ 3/	193,451	185,782	201,817	203,548	203,165	220,539	228,387	238,281	239,194	230,301
Processed (tons) 2/ 3/	11,867,170	10,886,350	12,726,880	12,474,040	12,273,200	12,892,100	12,019,110	15,157,790	16,130,020	16,753,580
Mushrooms (1,000 lbs.) 4/	490,826	561,631	595,681	567,956	614,383	631,819	667,759	714,992	749,488	—
Potatoes (1,000 cwt)	355,131	333,726	362,039	406,609	361,743	389,320	356,438	370,444	402,110	418,229
Sweetpotatoes (1,000 cwt)	14,833	12,083	12,902	14,573	12,368	11,811	10,945	11,358	12,594	11,496
Dry edible beans (1,000 cwt)	25,563	15,620	21,070	22,298	22,960	26,031	19,263	23,728	32,379	32,983
1991										
	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan
Shipments										
Fresh (1,000 cwt) 5/	20,661	30,842	26,747	29,105	17,211	15,711	20,930	17,354	16,683	22,759
Potatoes (1,000 cwt)	14,497	15,895	10,385	10,720	8,798	9,641	13,099	12,277	11,388	14,747
Sweetpotatoes (1,000 cwt)	283	291	188	151	93	220	403	820	433	301

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Fresh & processing agaricus mushrooms only. Excludes specialty varieties. Crop year July 1 - June 30. 5/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, & watermelons.

Information contacts: Gary Lucier or Cathy Greene (202) 219-0884.

Table 22.—Other Commodities

	Annual					1990		1991		
	1986	1987	1988	1989	1990	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept
Sugar										
Production 1/	6,267	7,309	7,087	8,841	6,335	652	3,435	2,208	626	848
Deliveries 1/	7,788	8,167	8,188	8,340	8,661	2,322	2,311	2,019	2,103	2,340
Stocks, ending 1/	3,225	3,195	3,132	2,948	2,642	1,210	2,729	3,530	2,487	1,513
Coffee										
Composite green price N.Y. (cts./lb.)	185.18	109.14	115.69	95.17	76.93	79.10	76.85	74.94	72.13	68.18
Imports, green bean equiv. (mil. lbs.) 2/	2,598	2,638	2,072	2,630	2,714	530	818	748	683	562
1991										
	Annual			1990						
	1988	1989	1990	July	Feb	Mar	Apr	May	June	July
Tobacco										
Prices at auctions 3/										
Flue-cured (\$/lb.)	1.61	1.67	1.67	—	—	—	—	—	—	—
Burley (\$/lb.)	1.61	1.67	1.75	—	177.0	—	—	—	—	—
Domestic consumption 4/										
Cigarettes (bil.)	562.5	540.1	523.1	39.8	39.4	47.1	40.1	49.3	45.8	44.0
Large cigars (mil.)	2,631	2,487.6	2,343.4	164.5	144.9	162.5	175.4	169.1	218.8	170.2

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured, Oct.-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: sugar, Peter Buzzanell (202) 219-0886, coffee, Fred Gray (202) 219-0888, tobacco, Verner Grise (202) 219-0890.

World Agriculture

Table 23.—World Supply & Utilization of Major Crops, Livestock & Products

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91 P	1991/92 F
Million units							
Wheat							
Area (hectares)	230.2	229.2	219.9	217.9	226.4	232.1	222.9
Production (metric tons)	501.0	531.1	502.4	501.3	537.9	593.2	547.0
Exports (metric tons) 1/	84.8	91.2	106.1	97.1	96.2	92.8	106.2
Consumption (metric tons) 2/	496.6	523.1	531.2	531.8	534.8	573.7	562.3
Ending stocks (metric tons) 3/	169.7	177.6	148.8	118.3	121.4	140.8	125.6
Coarse grains							
Area (hectares)	342.0	337.0	324.7	326.0	322.9	316.4	324.0
Production (metric tons)	844.0	833.2	796.2	731.6	802.7	832.6	803.4
Exports (metric tons) 1/	83.2	83.7	82.9	94.2	100.0	86.1	86.6
Consumption (metric tons) 2/	779.7	807.4	816.6	795.9	828.2	819.6	815.0
Ending stocks (metric tons) 3/	208.2	234.0	213.6	149.3	123.8	136.8	125.2
Rice, milled							
Area (hectares)	145.0	145.4	141.9	145.8	146.8	146.6	146.1
Production (metric tons)	319.2	318.3	316.4	332.0	344.3	351.5	345.5
Exports (metric tons) 4/	12.6	12.9	11.9	15.1	12.1	12.4	13.4
Consumption (metric tons) 2/	319.7	322.3	321.8	329.7	337.6	347.1	352.2
Ending stocks (metric tons) 3/	55.4	51.4	46.0	48.3	56.0	59.3	53.7
Total grains							
Area (hectares)	717.2	710.6	686.5	689.7	696.1	695.1	693.0
Production (metric tons)	1,664.2	1,682.6	1,615.0	1,564.9	1,684.9	1,777.3	1,696.9
Exports (metric tons) 1/	180.6	187.8	200.9	206.4	208.3	191.3	206.2
Consumption (metric tons) 2/	1,596.0	1,652.8	1,669.6	1,657.4	1,700.6	1,740.4	1,729.5
Ending stocks (metric tons) 3/	433.3	483.0	408.4	315.9	300.2	336.6	304.4
Oilseeds							
Crush (metric tons)	155.1	161.8	168.5	166.4	173.2	178.6	184.1
Production (metric tons)	196.2	194.9	210.6	204.1	214.1	217.6	225.1
Exports (metric tons)	34.5	37.7	39.5	32.0	36.0	33.8	35.9
Ending stocks (metric tons)	26.8	23.3	24.0	22.2	23.2	23.3	24.4
Meals							
Production (metric tons)	105.0	110.7	115.4	112.2	117.9	120.9	123.8
Exports (metric tons)	34.4	36.7	35.8	37.9	39.1	39.9	40.1
Oils							
Production (metric tons)	49.4	50.4	53.3	53.9	57.6	58.9	60.7
Exports (metric tons)	16.4	16.9	17.5	18.2	19.9	20.1	20.3
Cotton							
Area (hectares)	31.7	29.6	31.0	33.7	31.6	33.0	34.2
Production (bales)	80.4	70.7	81.0	84.6	79.9	87.0	95.5
Exports (bales)	20.3	26.0	23.2	25.9	24.0	23.1	22.9
Consumption (bales)	79.9	82.8	84.1	85.2	86.6	85.6	85.8
Ending stocks (bales)	48.5	35.9	32.9	32.1	26.2	28.2	37.9
	1986	1987	1988	1989	1990	1991 P	1992 F
Red meat							
Production (metric tons)	109.8	112.7	116.4	117.8	119.5	119.2	121.6
Consumption (metric tons)	108.6	110.8	114.4	116.4	117.6	117.5	120.2
Exports (metric tons) 1/	6.6	6.7	7.1	7.3	7.2	7.2	7.3
Poultry 5/							
Production (metric tons)	30.2	31.4	33.1	34.3	36.2	37.7	39.2
Consumption (metric tons)	29.9	31.0	32.7	33.9	35.8	37.2	38.8
Exports (metric tons) 1/	1.2	1.5	1.7	1.8	2.1	2.2	2.3
Dairy							
Milk production (metric tons)	425.9	425.7	429.0	434.9	442.6	426.8	425.3

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1986 data correspond with 1985/86, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = preliminary. F = forecast.

Information contacts: Crops, Carol Whitton (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

Table 24.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1990		1991				1992
	1989	1990	1991	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	4.66	3.72	3.52	3.05	3.44	3.63	4.00	4.09	4.40	4.65
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.85	2.79	2.75	2.71	2.81	2.77	2.79	2.74	2.73	2.79
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.70	2.65	2.60	2.68	2.69	2.71	2.74	2.70	2.76	2.86
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.08	6.24	6.05	6.03	6.07	6.26	5.99	5.97	5.91	6.00
Soybean oil, Decatur (cts./lb.)	20.21	22.75	20.14	21.42	20.09	20.02	19.06	18.52	18.67	18.61
Soybean meal, Decatur (\$/ton)	216.59	189.37	172.90	156.36	181.32	192.23	181.83	178.38	171.38	172.43
Cotton, 8-market avg. spot (cts./lb.)	63.78	71.25	69.69	70.51	66.44	62.54	58.28	54.70	53.89	51.53
Tobacco, avg. price at auction (cts./lb.)	161.74	166.06	173.53	171.81	165.49	178.48	178.02	181.93	179.98	175.95
Rice, f.o.b. mill, Houston (\$/cwt)	15.68	15.52	16.46	14.50	17.00	17.00	16.50	17.00	17.50	17.50
Indeible tallow, Chicago (cts./lb.)	14.71	13.54	13.26	14.53	14.00	13.50	13.68	13.21	12.50	0
Import commodities										
Coffee, N.Y. spot (\$/lb.)	1.04	0.81	0.71	0.82	0.66	0.68	0.61	0.59	0.57	0.57
Rubber, N.Y. spot (cts./lb.)	50.65	46.28	45.73	47.47	44.45	44.45	44.54	44.75	44.15	43.11
Cocoa beans, N.Y. (\$/lb.)	0.55	0.55	0.52	0.55	0.49	0.56	0.58	0.57	0.59	0.56

Information contact: Mary Teymourian (202) 219-0824.

Table 25.—Indexes of Real Trade-Weighted Dollar Exchange Rates ^{1/}

	1991									1992	
	Apr	May	June	July	Aug	Sept P	Oct P	Nov P	Dec P	Jan P	Feb P
	1985 = 100										
Total U.S. trade ^{2/}	66.6	67.1	69.4	69.3	68.2	66.5	66.0	64.0	62.4	62.4	61.4
Agricultural trade											
U.S. markets	79.4	79.7	80.8	80.6	79.9	78.5	78.2	76.9	75.8	75.2	74.3
U.S. competitors	77.1	77.4	77.8	77.7	76.8	75.6	76.1	75.3	74.7	74.8	74.1
Wheat											
U.S. markets	97.7	98.6	98.7	99.0	98.2	96.4	96.3	95.3	93.9	93.0	91.9
U.S. competitors	71.4	71.3	71.9	71.6	70.8	70.2	69.9	69.4	69.6	70.4	70.1
Soybeans											
U.S. markets	68.1	68.4	70.2	69.8	68.8	67.4	66.7	65.0	63.8	63.2	62.2
U.S. competitors	58.1	57.9	56.8	55.6	54.6	54.7	54.7	54.9	55.0	55.3	54.9
Corn											
U.S. markets	73.3	73.5	74.6	74.1	73.7	72.3	71.3	70.0	69.2	68.2	67.2
U.S. competitors	65.0	64.9	65.7	65.1	64.3	63.3	63.3	62.2	61.2	61.0	60.4
Cotton											
U.S. markets	74.7	74.9	75.9	75.6	75.2	74.1	73.6	72.7	72.1	71.6	71.0
U.S. competitors	89.5	89.7	89.3	88.7	88.2	86.7	86.3	86.3	84.3	82.5	81.0

^{1/} Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. ^{2/} Federal Reserve Board index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0718.

Table 26.—Trade Balance

	Fiscal year ^{1/}								Dec
	1985	1986	1987	1988	1989	1990	1991	1992 F	1991
	\$ million								
Exports									
Agricultural	31,201	26,312	27,876	35,316	39,590	40,220	37,609	40,000	3,902
Nonagricultural	179,236	179,291	202,911	258,656	301,269	326,059	356,682	—	29,667
Total ^{2/}	210,437	205,603	230,787	293,972	340,859	366,279	394,291	—	33,569
Imports									
Agricultural	19,740	20,884	20,650	21,014	21,476	22,560	22,588	22,000	1,948
Nonagricultural	313,722	342,846	387,374	409,138	441,075	458,101	463,720	—	38,409
Total ^{3/}	333,462	363,730	388,024	430,152	462,551	480,661	486,308	—	40,357
Trade balance									
Agricultural	11,461	5,428	7,226	14,302	18,114	17,660	15,021	18,000	1,954
Nonagricultural	-134,486	-163,555	-164,483	-150,482	-139,806	-132,042	-107,038	—	-8,742
Total	-123,025	-158,127	-157,237	-136,180	-121,692	-114,382	-92,017	—	-6,788

^{1/} Fiscal years begin October 1 & end September 30. Fiscal year 1991 began Oct. 1, 1990 & ended Sept. 30, 1991. ^{2/} Domestic exports including Department of Defense shipments (F.A.S. value). ^{3/} Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 27.—U.S. Agricultural Exports & Imports

	Fiscal year*			Dec	Fiscal year*			Dec
	1990	1991	1992 F	1991	1990	1991	1992 F	1991
EXPORTS								
	1,000 units				\$ million			
Animals, live (no.) 1/	885	1,235	—	150	381	548	—	84
Meats & preps., excl. poultry (mt)	873	937	2/ 800	90	2,457	2,774	—	244
Dairy products (mt) 1/	105	43	—	32	358	293	600	69
Poultry meats (mt)	583	628	700	80	679	737	—	87
Fats, oils, & greases (mt)	1,265	1,189	1,200	110	459	419	—	39
Hides & skins incl. furskins	—	—	—	—	1,794	1,453	—	102
Cattle hides, whole (no.) 1/	23,920	21,608	—	1,582	1,412	1,193	—	85
Mink pelts (no.) 1/	5,128	3,941	—	19	118	74	—	6/
Grains & feeds (mt)	112,925	100,016	—	8,517	15,698	12,206	3/ 13,300	1,135
Wheat (mt)	28,068	26,708	33,000	3,069	4,212	2,857	4/ 4,300	357
Wheat flour (mt)	851	1,076	900	85	198	202	—	12
Rice (mt)	2,491	2,401	2,100	227	830	749	700	75
Feed grains, incl. products (mt)	69,384	52,337	45,900	4,172	8,094	5,789	5,300	473
Feeds & fodders (mt)	11,153	16,389	5/ 11,500	871	1,828	1,914	—	155
Other grain products (mt)	978	1,105	—	113	536	695	—	63
Fruits, nuts, & preps. (mt)	2,872	2,849	—	258	2,788	3,038	—	278
Fruit juices incl.	—	—	—	—	—	—	—	—
froz. (1,000 hectoliters) 1/	5,975	6,310	—	613	328	338	—	33
Vegetables & preps. (mt)	2,243	2,589	—	258	2,079	2,597	—	234
Tobacco, unmanufactured (mt)	218	239	200	26	1,359	1,533	1,500	156
Cotton, excl. linters (mt)	1,666	1,565	1,600	172	2,704	2,805	2,400	289
Seeds (mt)	559	514	—	62	573	618	600	103
Sugar, cane or beet (mt)	447	589	—	34	187	219	—	11
Oilseeds & products (mt)	23,745	21,976	—	3,458	6,099	5,807	6,600	829
Oilseeds (mt)	17,669	15,633	—	2,697	4,239	3,811	—	618
Soybeans (mt)	17,229	15,139	18,100	2,593	3,942	3,465	4,000	572
Protein meal (mt)	4,780	5,292	—	643	1,032	1,073	—	140
Vegetable oils (mt)	1,296	1,051	—	118	829	723	—	72
Essential oils (mt)	14	13	—	1	182	183	—	16
Other	91	92	—	6	2,115	2,441	—	213
Total	147,683	133,219	134,500	13,104	40,220	37,609	40,000	3,902
IMPORTS								
Animals, live (no.) 1/	2,938	3,188	—	273	1,053	1,131	1,100	108
Meats & preps., excl. poultry (mt)	1,142	1,191	—	77	2,848	3,016	—	190
Beef & veal (mt)	754	811	722	50	1,842	2,024	1,800	126
Pork (mt)	340	322	340	23	888	866	800	55
Dairy products (mt) 1/	255	231	—	24	951	807	800	77
Poultry & products 1/	—	—	—	—	129	119	—	11
Fats, oils, & greases (mt)	19	33	—	3	15	19	—	2
Hides & skins, incl. furskins 1/	—	—	—	—	182	153	—	17
Wool, unmanufactured (mt)	47	50	—	6	187	175	—	17
Grains & feeds (mt)	3,481	4,163	4,650	392	1,181	1,271	1,200	116
Fruits, nuts, & preps., excl. juices (mt)	5,331	5,848	5,580	485	2,486	2,740	—	232
Bananas & plantains (mt)	3,236	3,397	3,400	297	928	992	1,000	84
Fruit juices (1,000 hectoliters) 1/	33,933	27,948	32,000	2,813	1,002	737	—	95
Vegetables & preps. (mt)	2,243	2,180	—	190	2,264	2,185	2,100	189
Tobacco, unmanufactured (mt)	193	215	220	11	588	698	700	30
Cotton, unmanufactured (mt)	30	18	—	1	20	16	—	1
Seeds (mt)	171	189	170	9	164	173	200	17
Nursery stock & cut flowers 1/	—	—	—	—	519	538	—	45
Sugar, cane or beet (mt)	1,789	1,785	—	130	734	717	—	52
Oilseeds & products (mt)	2,016	2,077	—	172	964	959	1,000	82
Oilseeds (mt)	534	445	—	19	208	151	—	8
Protein meal (mt)	310	412	—	61	48	57	—	8
Vegetable oils (mt)	1,171	1,220	—	92	710	750	—	66
Beverages excl. fruit juices (1,000 hectoliters) 1/	13,543	12,987	—	1,012	1,867	1,858	—	145
Coffee, tea, cocoa, spices	2,202	2,025	2,055	226	3,465	3,280	—	345
Coffee, incl. products (mt)	1,290	1,116	1,150	130	1,997	1,831	1,800	190
Cocoa beans & products (mt)	698	680	690	73	1,042	1,005	1,000	109
Rubber & allied gums (mt)	840	792	790	70	712	664	700	57
Other	—	—	—	—	1,229	1,332	—	114
Total	—	—	—	—	22,560	22,588	22,000	1,948

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1991 began Oct. 1, 1990 & ended Sept. 30, 1991. 1/ Not included in total volume and also other dairy products for 1989 & 1990. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 676,000 m. tons. 3/ 16,014 million. 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. 6/ Less than \$500. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 28.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*			Dec 1991	Change from year* earlier			Dec 1991
	1990	1991	1992 F		1990	1991	1992 F	
	\$ million				Percent			
WESTERN EUROPE	7,367	7,312	7,400	890	4	0	-1	11
European Community (EC-12)	6,873	6,778	6,900	833	4	-1	1	10
Belgium-Luxembourg	428	484	—	47	-1	9	—	-5
France	489	571	—	90	-1	22	—	33
Germany	1,154	1,135	—	117	17	4	—	-24
Italy	702	675	—	96	15	-4	—	5
Netherlands	1,638	1,581	—	227	-11	-5	—	44
United Kingdom	780	883	—	72	3	18	—	-13
Portugal	338	251	—	19	10	-28	—	-27
Spain, Incl. Canary Islands	678	855	—	108	16	-12	—	19
Other Western Europe	493	538	500	67	-3	8	0	19
Switzerland	171	194	—	24	3	13	—	41
EASTERN EUROPE	475	306	200	27	35	-43	-33	-4
Poland	101	48	—	4	124	-54	—	153
Yugoslavia	129	74	—	6	69	-43	—	-55
Romania	219	82	—	12	239	-61	—	33,804
USSR	3,006	1,758	2,500	281	-9	-42	39	375
ASIA	18,174	18,094	17,200	1,592	-3	-11	7	16
West Asia (Mideast)	1,996	1,430	1,600	143	-12	-28	14	16
Turkey	280	224	—	10	9	-14	—	-41
Iraq	497	0	0	0	-37	-100	0	0
Israel, Incl. Gaza & W. Bank	285	287	—	42	-14	1	—	122
Saudi Arabia	502	536	600	48	4	7	20	-25
South Asia	723	375	—	51	-38	-48	—	313
Bangladesh	120	67	—	8	-44	-44	—	114
India	118	95	—	8	-52	-18	—	18
Pakistan	391	144	200	35	-35	-63	-75	1,735
China	909	668	1,000	62	-39	-27	43	60
Japan	8,156	7,736	8,000	680	0	-5	4	-4
Southeast Asia	1,184	1,239	—	141	21	5	—	38
Indonesia	277	279	—	42	28	1	—	63
Philippines	351	373	400	33	2	6	0	2
Other East Asia	5,206	4,646	4,800	515	13	-11	2	32
Taiwan	1,819	1,739	1,800	239	14	-4	6	72
Korea, Rep.	2,701	2,159	2,200	209	10	-20	0	12
Hong Kong	685	745	800	68	19	9	14	6
AFRICA	2,011	1,884	1,800	158	-12	-6	-5	39
North Africa	1,527	1,388	1,300	121	-15	-9	-7	50
Morocco	184	129	—	15	-24	-21	—	3
Algeria	491	479	500	38	-11	-2	10	57
Egypt	783	692	700	68	-20	-9	0	70
Sub-Sahara	484	496	500	35	0	2	0	11
Nigeria	32	44	—	1	7	37	—	-76
Rep. S. Africa	81	74	—	8	43	-9	—	290
LATIN AMERICA & CARIBBEAN	5,155	5,500	5,700	555	-5	7	4	22
Brazil	105	271	200	19	-30	159	-33	-66
Caribbean Islands	1,008	1,010	—	93	0	0	—	12
Central America	463	497	—	58	3	7	—	19
Colombia	147	124	—	4	6	-16	—	-41
Mexico	2,666	2,884	3,000	296	-3	8	3	56
Peru	187	150	—	29	132	-20	—	64
Venezuela	345	307	400	27	-41	-11	0	4
CANADA	3,715	4,409	4,700	357	70	19	7	18
OCEANIA	317	346	400	45	18	9	0	49
TOTAL	40,220	37,609	40,000	3,902	2	-6	6	23
Developed countries	19,863	20,104	20,400	2,017	10	2	1	9
Less developed countries	15,966	14,769	15,800	1,516	-3	-7	7	28
Centrally planned countries	4,390	2,736	3,800	370	-15	-38	41	193

* Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1991 began Oct. 1, 1990 & ended Sept. 30, 1991. F = forecast. — = not available.
 Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822

Farm Income

Table 29.—Farm Income Statistics

	Calendar year										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F
	\$ billion										
1. Farm receipts	147.8	141.9	147.7	150.1	140.2	148.3	157.3	168.8	175.8	174	183 to 170
Crops (incl. net CCC loans)	72.3	67.2	68.9	74.3	63.7	65.8	71.6	78.8	80.4	81	81 to 85
Livestock	70.3	69.6	72.9	69.8	71.8	76.0	79.4	84.1	89.8	88	82 to 85
Farm related 1/	5.2	5.1	4.9	6.0	6.7	6.8	6.3	8.1	6.7	7	6 to 8
2. Direct Government payments	3.5	9.3	8.4	7.7	11.8	18.7	14.5	10.9	9.3	8	7 to 10
Cash payments	3.5	4.1	4.0	7.6	8.1	6.6	7.1	9.1	8.4	8	7 to 10
Value of PIK commodities	0.0	5.2	4.5	0.1	3.7	10.1	7.4	1.7	0.9	0	0 to 1
3. Gross cash income (1+2) 2/	161.3	151.1	156.1	157.9	152.8	165.1	171.9	179.9	186.0	182	178 to 188
4. Nonmoney income 3/	14.3	13.6	6.9	6.8	5.5	5.8	6.1	6.1	6.3	6	6 to 7
5. Value of inventory change	-1.4	-10.9	6.0	-2.3	-2.2	-2.3	-3.5	4.3	2.9	0	0 to 6
6. Total gross farm income (3+4+5)	164.1	153.9	169.0	161.2	156.1	168.4	174.5	190.3	195.1	188	186 to 194
7. Cash expenses 4/	113.2	112.8	118.7	110.7	105.0	109.8	114.6	120.6	124.2	125	126 to 132
8. Total expenses	140.3	139.6	141.9	132.4	125.1	128.7	133.9	140.2	144.3	146	146 to 154
9. Net cash income (4-7)	38.1	38.4	37.4	47.1	47.8	55.3	57.4	59.4	61.8	57	49 to 65
10. Net farm income (3-8)	23.8	14.2	28.1	28.8	31.0	39.7	40.6	50.1	60.8	42	37 to 43
Deflated (1987\$)	28.6	16.3	28.7	30.5	32.0	39.7	39.1	46.2	45.0	36	30 to 36
11. Off-farm income	36.4	37.0	39.2	55.2	54.6	58.3	57.2	57.3	67.0	60	59 to 62
12. Loan charges 5/	3.0	1.4	3.6	-6.6	-9.8	-8.0	-4.8	-2.3	-1.9	-0	0 to 2
13. 5/ Non-real estate	3.4	0.9	-0.8	-9.8	-11.0	-4.8	-0.3	0.1	1.3	1	-1 to 1
14. Rental income plus monetary change	6.7	6.5	8.4	8.3	7.2	7.1	7.9	8.0	8.6	12	11 to 14
15. Capital expenditures 5/	13.3	12.7	12.6	9.2	8.5	11.2	11.3	12.6	13.4	13	11 to 14
16. Net cash flow (9+12+13+14-15)	37.0	33.4	36.0	30.1	25.9	38.7	49.0	52.8	56.4	56	50 to 55

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. — = not available.

Information contact: Robert McElroy (202) 219-0800.

Table 30.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F
	\$ billion										
Assets											
Real estate	750.0	753.4	681.7	588.1	542.2	578.8	599.4	605.1	814.4	824	825 to 835
Non-real estate	195.6	191.9	196.9	187.4	182.3	194.2	205.8	214.7	220.9	221	221 to 231
Livestock & poultry	53.0	49.5	49.5	46.3	47.8	58.0	62.2	66.2	69.1	66	66 to 72
Machinery & motor vehicles	86.0	85.8	85.0	82.9	81.5	80.0	82.0	85.8	87.4	89	88 to 92
Crops stored 2/	28.4	24.4	26.3	22.9	16.6	17.8	22.7	23.3	22.4	23	20 to 24
Purchased inputs	—	—	2.0	1.2	2.1	3.0	3.3	2.7	2.8	3	2 to 4
Financial assets	29.7	30.9	32.8	33.3	34.6	35.1	35.4	36.8	38.5	40	39 to 43
Total farm assets	945.1	944.0	857.1	772.6	724.6	772.6	805.1	819.7	834.8	845	850 to 880
Liabilities											
Real estate debt 3/	101.8	103.2	106.7	100.1	90.4	82.4	77.8	75.3	73.4	73	72 to 76
Non-real estate debt 4/	87.0	87.9	87.1	77.5	66.8	82.0	61.7	61.8	63.1	64	63 to 67
Total farm debt	188.8	191.1	193.8	177.6	157.0	144.4	139.4	137.1	136.5	137	136 to 142
Total farm equity	756.3	752.9	663.3	595.0	567.6	628.1	665.8	682.6	698.2	708	710 to 720
	Percent										
Selected ratios											
Debt-to-assets	20.0	20.2	22.6	23.0	21.7	18.7	17.3	16.7	16.3	16	16 to 17
Debt-to-equity	25.0	25.4	29.2	29.8	27.7	23.0	20.9	20.1	19.6	19	19 to 20
Debt-to-net cash income	496	498	518	377	328	261	243	231	221	235	240 to 290

1/ As of Dec. 31. 2/ Non-COC crops held on farms plus value above loan rates for crops held under COC. 3/ Excludes debt on operator dwellings, but includes COC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0798.

Table 31.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1989	1990	Nov 1991	Dec 1991	1989	1990	Nov 1991	Dec 1991	1989	1990	Nov 1991	Dec 1991
	\$ million 2/											
NORTH ATLANTIC												
Maine	216	220	17	21	228	240	21	17	444	460	38	37
New Hampshire	65	63	5	5	73	71	5	5	139	134	10	10
Vermont	379	398	31	33	50	49	4	3	429	447	36	36
Massachusetts	113	116	9	10	321	303	53	33	434	418	62	43
Rhode Island	13	13	1	1	65	58	4	8	78	71	5	9
Connecticut	188	196	16	25	240	250	17	15	426	446	33	40
New York	1,937	1,983	152	165	917	1,023	94	92	2,854	3,006	245	257
New Jersey	197	199	17	17	464	452	43	30	662	647	59	47
Pennsylvania	2,611	2,714	195	251	992	1,053	98	85	3,602	3,767	291	336
NORTH CENTRAL												
Ohio	1,698	1,836	135	199	2,088	2,335	312	171	3,787	4,172	447	370
Indiana	1,826	2,060	164	181	2,456	2,871	414	128	4,281	4,931	578	289
Illinois	2,251	2,477	184	202	4,727	5,461	550	347	6,979	7,938	733	550
Michigan	1,311	1,398	101	112	1,611	1,785	273	197	2,923	3,183	374	309
Wisconsin	4,350	4,581	350	394	1,050	1,125	184	106	5,400	5,706	534	600
Minnesota	3,693	3,758	295	302	2,820	3,253	481	271	6,513	7,011	778	574
Iowa	5,293	5,882	421	688	3,755	4,437	552	297	9,049	10,319	973	985
Missouri	2,169	2,271	232	234	1,751	1,668	241	122	3,920	3,939	473	356
North Dakota	699	813	78	72	1,483	1,724	302	213	2,152	2,537	380	285
South Dakota	2,031	2,313	226	188	951	1,036	110	65	2,982	3,349	335	254
Nebraska	5,646	6,037	596	444	3,080	2,808	405	248	8,726	8,845	1,001	692
Kansas	4,416	4,896	325	327	2,132	2,099	209	184	6,548	6,995	534	512
SOUTHERN												
Delaware	503	480	29	40	159	184	24	11	662	664	53	51
Maryland	859	828	63	66	477	517	64	33	1,336	1,345	127	99
Virginia	1,345	1,379	133	91	694	741	73	78	2,039	2,120	206	169
West Virginia	250	269	26	20	60	70	6	12	310	338	33	31
North Carolina	2,510	2,653	232	210	2,082	2,214	221	123	4,593	4,867	452	334
South Carolina	554	577	50	44	680	699	65	44	1,235	1,178	115	88
Georgia	2,281	2,268	184	188	1,626	1,574	232	132	3,908	3,842	395	318
Florida	1,215	1,260	91	129	5,031	4,448	310	472	6,246	5,708	401	601
Kentucky	1,858	1,698	259	115	1,298	1,400	219	517	2,924	3,098	478	632
Tennessee	1,082	1,111	81	88	863	928	217	205	1,946	2,039	298	293
Alabama	1,975	2,063	167	157	698	655	104	67	2,671	2,737	272	224
Mississippi	1,295	1,322	102	110	981	1,111	308	246	2,276	2,433	410	356
Arkansas	2,661	2,706	214	211	1,496	1,553	404	210	4,167	4,259	618	421
Louisiana	814	837	48	57	1,094	1,284	315	240	1,708	1,921	383	297
Oklahoma	2,377	2,363	196	156	1,137	1,191	91	96	3,515	3,554	287	252
Texas	5,861	7,712	588	543	4,063	4,268	515	486	10,923	11,981	1,103	1,030
WESTERN												
Montana	929	864	120	69	825	742	102	99	1,554	1,606	222	167
Idaho	1,084	1,154	96	80	1,662	1,781	243	172	2,745	2,935	339	252
Wyoming	664	610	80	37	163	157	47	26	827	767	127	63
Colorado	2,649	3,029	225	268	1,321	1,184	148	113	3,969	4,213	373	381
New Mexico	974	1,048	140	85	485	483	65	47	1,459	1,529	206	132
Arizona	744	819	62	108	1,182	1,046	195	151	1,926	1,865	256	259
Utah	587	576	51	52	188	179	13	14	755	755	64	66
Nevada	142	218	14	15	102	115	10	9	244	333	24	24
Washington	1,233	1,396	117	114	2,457	2,420	272	245	3,689	3,816	389	359
Oregon	738	755	71	57	1,548	1,557	180	112	2,285	2,312	251	168
California	5,193	5,515	461	636	12,857	13,344	1,605	1,053	18,050	18,859	2,066	1,688
Alaska	9	8	1	1	20	19	2	2	29	27	3	3
Hawaii	92	88	7	7	493	499	41	41	585	588	49	48
UNITED STATES	84,131	89,623	7,438	7,605	78,761	80,364	10,461	7,694	160,893	169,987	17,899	15,298

1/ Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0806.

Table 32.—Cash Receipts From Farming

	Annual						1990	1991				
	1985	1986	1987	1988	1989	1990	Dec	Aug	Sept	Oct	Nov	Dec
	\$ million											
Farm marketings & CCC loans*	144,114	135,303	141,759	151,082	160,893	169,987	14,419	13,185	15,021	19,242	17,899	15,298
Livestock & products	69,822	71,553	75,994	79,437	84,131	89,623	8,801	8,983	7,316	8,102	7,438	7,905
Meat animals	38,550	39,081	44,478	48,492	48,867	51,877	3,932	4,057	4,374	5,052	4,285	4,328
Dairy products	18,055	17,724	17,727	17,841	19,395	20,199	1,482	1,506	1,508	1,617	1,589	1,810
Poultry & eggs	11,209	12,701	11,516	12,868	15,372	15,270	1,224	1,239	1,217	1,265	1,264	1,308
Other	2,008	2,048	2,274	2,436	2,507	2,477	184	181	217	168	313	163
Crops	74,293	63,749	65,784	71,846	78,761	80,384	7,617	8,201	7,996	11,140	10,481	7,894
Food grains	8,990	5,741	6,776	7,467	8,247	7,878	472	663	823	858	682	684
Feed crops	22,591	16,911	14,578	14,298	17,061	19,116	1,795	1,677	1,600	2,381	2,827	1,536
Cotton (lint & seed)	3,687	3,371	4,189	4,548	5,040	5,234	1,003	224	231	798	1,917	1,147
Tobacco	2,699	1,894	1,816	2,083	2,415	2,736	364	459	479	328	188	692
Oil-bearing crops	12,476	10,614	11,283	13,500	11,898	12,403	1,071	717	1,239	3,275	1,675	766
Vegetables & melons	8,572	8,885	9,902	9,787	11,481	11,533	505	1,041	1,268	1,204	552	487
Fruits & tree nuts	6,946	7,252	8,062	9,204	9,257	9,308	1,072	710	1,124	1,224	1,357	1,128
Other	8,333	9,101	10,161	10,760	11,415	12,180	1,335	704	1,031	1,071	1,792	1,373
Government payments	7,704	11,813	19,747	14,480	19,887	9,298	1,864	65	103	1,391	320	1,373
Total	161,818	147,116	158,506	165,562	171,780	179,285	16,283	13,260	15,115	20,633	18,219	16,871

* Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period.

Information contact: Roger Strickland (202) 219-0806.

Table 33.—Farm Production Expenses

	Calendar year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F
	\$ million									
Feed purchased	20,573	19,383	16,949	17,472	17,463	20,393	21,002	20,727	20,000	18,000 to 22,000
Livestock purchased	8,818	9,487	9,184	9,758	11,842	12,764	13,138	14,737	14,000	12,000 to 16,000
Seed purchased	2,690	3,386	3,128	3,188	3,259	3,359	3,558	3,582	4,000	3,000 to 5,000
Farm-origin inputs	32,081	32,256	29,261	30,418	32,564	36,516	37,698	39,046	38,000	36,000 to 41,000
Fertilizer & lime	7,055	8,361	7,513	8,820	8,453	8,947	7,249	7,137	7,000	6,000 to 8,000
Fuels & oils	7,211	7,299	6,436	5,310	4,957	5,091	4,983	5,951	6,000	5,000 to 7,000
Electricity	1,982	2,060	1,878	1,795	2,156	2,278	1,990	1,944	2,000	1,000 to 3,000
Pesticides	3,870	4,888	4,334	4,324	4,812	4,577	5,437	5,727	6,000	6,000 to 7,000
Manufactured inputs	20,118	22,404	20,180	18,249	18,077	18,893	19,659	20,759	21,000	20,000 to 24,000
Short-term interest	10,815	10,396	8,735	7,367	6,797	6,797	6,910	8,805	7,000	6,000 to 9,000
Real estate interest 1/	10,815	10,733	9,878	9,131	8,187	7,885	7,781	7,867	7,000	6,000 to 8,000
Total interest charges	21,430	21,129	18,613	16,498	14,984	14,682	14,691	14,472	14,000	12,000 to 16,000
Repair & maintenance 1/ 2/	8,529	8,416	8,370	6,426	6,761	6,800	7,272	7,283	8,000	7,000 to 9,000
Contract & hired labor	8,938	9,427	10,008	9,484	9,975	10,441	11,110	12,543	14,000	12,000 to 16,000
Machine hire & custom work	2,213	2,566	2,354	2,099	2,105	2,350	2,674	2,634	3,000	2,000 to 4,000
Marketing, storage, & transportation	3,904	4,012	4,127	3,852	4,078	3,450	4,080	3,972	4,000	3,000 to 5,000
Misc. operating expenses 1/	10,961	10,331	10,010	9,759	11,327	11,404	12,446	12,236	11,000	10,000 to 14,000
Other operating expenses	32,545	32,751	32,868	31,420	34,248	34,445	37,582	38,989	41,000	41,000 to 46,000
Capital consumption 1/	23,758	20,847	19,299	17,788	16,740	17,075	17,553	17,546	18,000	18,000 to 20,000
Taxes 1/	4,465	4,337	4,542	4,612	4,853	4,848	5,127	5,823	6,000	5,000 to 7,000
Net rent to nonoperator landlord	5,211	8,150	7,890	6,099	7,304	7,445	7,911	8,177	8,000	7,000 to 9,000
Other overhead expenses	33,434	33,334	31,631	28,499	28,897	29,367	30,690	31,345	32,000	30,000 to 35,000
Total production expenses	139,608	141,873	132,433	125,084	128,737	133,902	140,219	144,261	148,000	148,000 to 164,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 219-0804, Robert McElroy (202) 219-0800.

Table 34.—CCC Net Outlays by Commodity & Function

COMMODITY/PROGRAM	Fiscal year									
	1984	1985	1986	1987	1988	1989	1990	1991	1992 E	1993 E
	\$ million									
COMMODITY/PROGRAM										
Feed grains										
Corn	-934	4,403	10,524	12,348	8,227	2,883	2,450	2,387	2,835	3,620
Grain sorghum	76	463	1,185	1,203	764	467	361	243	222	300
Barley	89	336	471	394	57	45	-93	71	185	135
Oats	5	2	28	17	-2	1	-5	12	40	28
Corn & oat products	8	7	5	7	7	8	8	9	10	4
Total feed grains	-758	5,211	12,211	13,967	9,053	3,384	2,721	2,722	3,092	4,087
Wheat	2,536	4,691	3,440	2,836	878	53	808	2,958	2,211	2,329
Rice	333	990	947	906	128	631	867	867	571	720
Upland cotton	244	1,553	2,142	1,788	868	1,481	-79	382	1,281	702
Tobacco	348	455	253	-348	-453	-387	-307	-143	-88	20
Dairy	1,502	2,085	2,337	1,166	1,295	879	505	839	330	341
Soybeans	-585	711	1,597	-478	-1,876	-86	5	40	-109	42
Peanuts	1	12	32	8	7	13	1	48	-16	-6
Sugar	10	184	214	-65	-248	-25	15	-20	-26	-27
Honey	90	81	89	73	100	42	47	19	11	8
Wool	132	109	123	152	17	93	104	172	178	185
Operating expense 3/	362	348	457	535	814	620	618	625	7	7
Interest expenditure	1,064	1,435	1,411	1,219	425	98	632	745	590	300
Export programs 4/	743	134	102	278	200	-102	-34	733	1,645	1,748
1989/90 Disaster/										
livestock assistance	0	0	0	0	0	3,919	2/ 161	121	1,029	0
Other	1,295	-314	488	371	1,865	110	809	2	1,258	1,258
Total	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,110	11,966	11,710
FUNCTION										
Price-support loans (net)	-27	6,272	13,628	12,199	4,579	-926	-399	418	641	352
Direct payments 5/										
Deficiency	812	6,302	6,168	4,833	3,971	5,798	4,178	6,224	6,100	7,446
Diversion	1,504	1,525	64	382	8	-1	0	0	0	0
Dairy termination	0	0	489	587	260	188	189	96	13	0
Other	0	0	27	60	0	42	3	21	252	93
Disaster	1	0	0	0	6	4	0	0	0	0
Total direct payments	2,117	7,827	6,748	5,862	4,245	6,011	4,370	6,341	6,365	7,539
1988/89 crop disaster	0	0	0	0	0	3,388	2/ 5	6	996	0
Emergency livestock/										
forage assistance	0	0	0	0	31	533	156	115	33	0
Purchases (net)	1,470	1,331	1,670	-479	-1,131	116	-48	648	344	468
Producer storage										
payments	268	329	485	832	658	174	185	1	26	24
Processing, storage,										
& transportation	639	657	1,013	1,859	1,113	659	317	394	205	138
Operating expense 3/	362	346	457	535	814	620	618	625	7	7
Interest expenditure	1,064	1,435	1,411	1,219	425	98	632	745	590	300
Export programs 4/	743	134	102	278	200	-102	-34	733	1,645	1,748
Other	679	-648	329	305	1,727	-46	669	86	1,114	1,134
Total	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,110	11,966	11,710

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Export Guarantee Program—Credit Reform, Direct Export Credit Program, Market Promotion Program, Export Enhancement Program, Dairy Export Incentive Program, & CCC Transfers to the General Sales Manager. 5/ Includes cash payments only. Excludes payment-in-kind in fiscal 83-85 & generic certificates in fiscal 86-83. E = Estimated in the fiscal 1993 President's Budget based on November, 1991 supply & demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdaleki (202) 720-5148.

Food Expenditures

Table 35.—Food Expenditures Estimates

	Annual			1991	1992		1992 year-to-date	
	1989	1990	1991	Dec	Jan P	Feb P	Jan P	Feb P
\$ billion								
Sales 1/								
Off-premise use 2/	272.1	286.3	292.6	25.7	23.9	23.1	23.9	47.0
Meals & snacks 3/	205.9	220.3	228.9	19.2	18.0	18.1	18.0	36.1
1990 \$ billion								
Sales 1/								
Off-premise use 2/	289.5	286.2	285.1	25.1	23.2	22.4	23.2	45.6
Meals & snacks 3/	215.6	220.2	221.3	18.3	17.2	17.2	17.2	34.4
Percent change from year earlier (\$ bil.)								
Sales 1/								
Off-premise use 2/	6.4	5.2	2.2	-0.9	2.9	6.6	2.9	4.7
Meals & snacks 3/	4.8	7.0	3.9	5.1	7.0	8.1	7.0	7.5
Percent change from year earlier (1990 \$ bil.)								
Sales 1/								
Off-premise use 2/	-0.2	-1.1	-0.4	-2.1	2.9	5.9	2.9	5.3
Meals & snacks 3/	0.2	2.1	0.5	2.2	4.0	5.2	4.0	4.6

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 575, Aug 1987.

Information contact: Alden Manchester (202) 219-0880.

Transportation

Table 36.—Rail Rates, Grain & Fruit-Vegetable Shipments

	Annual			1991						1992
	1989	1990	1991	Jan	Aug	Sept	Oct	Nov	Dec	Jan
Rail freight rate index 1/ (Dec. 1984=100)										
All products	106.4	107.5	109.3	108.6	109.4	109.2	109.3 P	109.4	109.4	109.3 P
Farm products	108.4	110.4	111.4	111.5	110.9	110.7	110.9 P	110.9	110.9	111.1 P
Grain	108.7	110.1	111.1	111.0	110.8	110.8	111.1 P	111.2	111.2	111.3 P
Food products	103.9	105.4	108.1	107.6	107.9	108.2	108.4 P	108.3	108.3	108.6 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	28.4	27.6	26.4	26.3	27.6 P	27.4 P	30.1 P	27.3 P	28.8 P	29.0 P
Barge shipments (mil. ton) 3/	3.3	3.8	3.3	1.6	3.8	3.3	3.6	3.7	2.9	1.8
Fresh fruit & vegetable shipments 4/ 5/										
Piggy back (mil. cwt)	2.2	1.8	1.5	1.2	1.7	1.6	1.5	1.3	1.3	1.5
Rail (mil. cwt)	2.6	2.3	2.1	2.4	0.7	1.6	2.3	2.8	2.8	3.1
Truck (mil. cwt)	42.3	41.5	41.8	39.6	41.7	38.9	41.5	43.8	40.3	40.2
Cost of operating trucks hauling produce 4/										
Fleet operation (cts./mile)	123.4	130.5	126.5	135.9	122.6	122.6	123.7	124.9	124.0	122.6

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Shipments on Illinois & Mississippi waterways. U.S. Corps of Engineers. 4/ Agricultural Marketing Service, USDA. 5/ Preliminary data for 1991. P = preliminary.

Information contact: T.Q. Hutchinson (202) 219-0840.

Indicators of Farm Productivity

Table 37.—Indexes of Farm Production, Input Use & Productivity ^{1/}

	1982	1983	1984	1985	1986	1987	1988	1989	1990 2/	1991 2/
	1977=100									
Farm output	116	96	112	118	111	110	102	114	119	120
All livestock products 3/	107	109	107	110	110	113	116	116	117	119
Meat animals	101	104	101	102	100	102	105	104	104	104
Dairy products	110	114	110	117	116	116	118	117	120	121
Poultry & eggs	119	120	123	128	133	144	148	153	162	168
All crops 4/	117	88	111	118	109	108	92	107	114	111
Feed grains	122	67	116	134	123	106	73	108	112	106
Hay & forage	109	100	107	106	106	102	89	101	101	103
Food grains	138	117	129	121	107	107	98	107	138	104
Sugar crops	96	93	95	97	106	111	105	105	107	112
Cotton	85	55	91	94	69	103	107	86	109	122
Tobacco	104	75	90	81	63	62	72	71	84	87
Oil crops	121	91	106	117	110	108	89	106	107	114
Cropland used for crops	101	88	99	98	94	88	87	90	90	—
Crop production per acre	116	100	112	120	116	123	106	119	127	—
Farm input 5/	98	96	95	91	89	89	87	87	88	—
Farm real estate	102	101	99	97	96	95	94	93	93	—
Mechanical power & machinery	89	86	85	80	77	74	74	73	71	—
Agricultural chemicals	118	102	120	115	109	111	112	119	122	—
Feed, seed, & livestock purchases	107	103	103	102	109	116	111	113	113	—
Farm output per unit of input	119	100	118	129	124	124	116	130	135	—
Output per hour of labor										
Farm 6/	125	99	121	139	139	142	135	147	142	—
Nonfarm 7/	99	102	105	106	108	109	111	112	111	—

1/ For historical data & indexes, see Economic Indicators of the Farm Sector: Production & Efficiency Statistics, 1986, ECIFS 5-8. 2/ Preliminary indexes for 1990 based on Crop Production: 1990 Summary, released in January 1991, & unpublished data from the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. — = not available.

Information contact: George Douvelis (202) 219-0432.

Food Supply & Use

Table 38.—Per Capita Consumption of Major Food Commodities ^{1/}

Commodity	1983	1984	1985	1986	1987	1988	1989	1990 2/
	Pounds							
Red meats 3/4/5/	123.9	123.7	124.9	122.2	117.4	119.5	115.9	112.4
Beef	74.1	73.8	74.8	74.4	69.5	68.6	65.4	63.9
Veal	1.4	1.5	1.5	1.6	1.3	1.1	1.0	0.9
Lamb & mutton	1.1	1.1	1.1	1.0	1.0	1.0	1.1	1.1
Pork	47.4	47.2	47.7	45.2	45.6	48.8	48.4	46.4
Poultry 3/4/5/	45.8	47.2	49.3	51.3	55.5	57.4	60.8	63.9
Chicken	37.0	38.2	39.8	40.7	43.4	44.7	47.3	49.4
Turkey	8.9	9.0	9.6	10.6	12.1	12.6	13.6	14.5
Fish & shellfish 4/	13.3	14.1	15.0	15.4	16.1	15.2	15.6	15.4
Eggs 5/	33.0	33.0	32.4	32.2	32.2	31.2	29.9	29.6
Dairy products								
Cheese (excluding cottage) 3/6/	20.6	21.5	22.5	23.1	24.1	23.7	23.8	24.7
American	11.6	11.9	12.2	12.1	12.4	11.5	11.0	11.1
Italian	5.3	5.9	6.5	7.0	7.6	8.1	8.5	9.1
Other cheese 7/	3.7	3.9	3.7	4.0	4.1	4.1	4.3	4.4
Cottage cheese	4.1	4.1	4.1	4.1	3.9	3.9	3.6	3.4
Beverage milks 3/	226.4	227.2	229.7	228.6	226.5	222.3	224.3	221.5
Fluid whole milk 8/	130.3	126.8	123.3	116.5	111.9	105.7	97.6	90.3
Fluid lowfat milk 9/	85.6	88.9	93.7	98.7	100.6	100.5	106.5	108.3
Fluid skim milk	10.6	11.6	12.6	13.5	14.0	16.1	20.2	22.9
Fluid cream products 10/	5.7	6.2	6.7	7.0	7.1	7.1	7.3	7.1
Yogurt (excluding frozen)	3.3	3.7	4.1	4.4	4.4	4.7	4.3	4.1
Ice cream	18.1	18.2	18.1	18.4	18.3	17.3	16.1	15.7
Ice milk	6.9	7.0	6.9	7.2	7.4	8.0	8.4	7.7
All dairy products, milk equivalent, milkfat basis 11/	572.9	581.9	593.7	591.5	601.3	583.2	585.3	570.7
Fats & oils — Total fat content	60.0	58.8	64.3	64.3	62.9	63.0	61.1	62.7
Butter & margarine (product weight)	15.3	15.3	15.7	16.0	15.2	14.8	14.6	15.3
Shortening	18.5	21.3	22.9	22.1	21.4	21.5	21.5	22.2
Lard & edible tallow (direct use)	4.2	3.8	3.7	3.5	2.7	2.6	2.7	3.0
Salad & cooking oils	23.6	19.9	23.5	24.2	25.4	25.8	24.0	24.2
Fresh fruits 12/	93.2	91.7	89.3	95.9	101.1	99.2	99.2	92.3
Canned fruit 13/	12.8	12.3	12.7	12.9	13.6	13.3	13.4	13.4
Dried fruit	2.5	2.5	2.8	2.7	2.6	2.9	3.2	3.2
Frozen fruit	2.9	3.0	3.3	3.6	3.9	3.8	4.6	4.3
Frozen citrus juices 14/	41.7	35.7	40.5	43.2	40.2	40.1	34.3	27.2
Vegetables 12/								
Fresh	92.6	100.3	100.2	99.3	105.7	109.6	112.9	111.0
Canning	85.2	90.9	87.8	97.9	87.8	83.5	90.7	93.2
Freezing	14.6	17.5	17.1	15.8	16.8	18.3	17.8	18.1
Potatoes, all 12/	118.4	121.9	122.4	125.7	125.7	122.2	126.7	127.2
Sweet potatoes 12/	4.6	4.9	5.4	4.4	4.4	4.1	4.1	4.7
Peanuts (shelled)	5.9	6.1	6.3	6.4	6.4	6.9	7.0	6.2
Tree nuts (shelled)	2.3	2.4	2.4	2.3	2.2	2.3	2.3	2.5
Flour & cereal products 15/	149.0	150.6	158.0	163.9	173.4	172.9	175.0	185.4
Wheat flour	117.7	119.2	124.7	125.7	129.9	130.0	129.2	137.9
Rice (milled basis)	9.9	8.5	9.0	11.6	14.0	14.3	15.2	16.1
Caloric sweeteners 16/	124.3	127.0	130.0	129.1	132.6	133.2	134.3	137.5
Coffee (green bean equiv.)	10.1	10.2	10.5	10.5	10.2	9.8	10.3	10.2
Cocoa (chocolate liquor equiv.)	3.2	3.4	3.7	3.8	3.9	3.8	3.9	4.2

1/ In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, & ending stocks. Calendar-year data except fresh citrus fruits, peanuts, tree nuts, & rice, which are on crop-year basis. 2/ Preliminary. 3/ Total may not add due to rounding. 4/ Boneless, trimmed weight. 5/ Excludes shipments to the U.S. territories. 6/ Natural equivalent of cheese & cheese products. Total product weight is greater than natural equivalent because processed cheese & cheese food are made from natural cheese & other dairy products. Includes miscellaneous cheese not shown separately. 7/ Includes Swiss, Brick, Munster, cream, Neuchâtel, Blue, Gorgonzola, Edam, & Gouda. 8/ Plain & flavored. 9/ Plain & flavored & buttermilk. 10/ Heavy cream, light cream, half & half, & sour cream & dip. 11/ Includes condensed & evaporated milk & dry milk products. 12/ Farm weight. 13/ Excludes pineapple & berries. 14/ Single strength equivalent. 15/ Includes rye, corn, oat, & barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, & fuel. 16/ Dry weight equivalent.

Information contact: Judy Jones Putnam (202) 219-0870.

United States
Department of Agriculture
Washington, DC 20250

OFFICIAL BUSINESS
Penalty for Private Use, \$300

FIRST-CLASS MAIL
POSTAGE & FEES PAID
U.S. Dept. of Agriculture
Permit No. G-145

Moving? To change your address, send this sheet with label intact, showing new address, to EMS Information, Rm. 228, 1301 New York Ave., N.W., Washington, D.C. 20005-4788

What's Your Subscription Situation?

Your subscription to *Agricultural Outlook* expires in the month and year shown on the top line of your mailing label. The expiration date will appear in one of two formats: APR92 (for April 1992) or 920430 (for April 30, 1992). Disregard this notice if no renewal date appears. Renew today by calling, toll free, 1-800-999-6779, or return this form with your mailing label attached.

Agricultural Outlook Renewal

		1 Year	2 Years	3 Years
<input type="checkbox"/> Bill me.	Domestic	<input type="checkbox"/> \$26.00	<input type="checkbox"/> \$51.00	<input type="checkbox"/> \$75.00
<input type="checkbox"/> Enclosed is \$_____.	Foreign	<input type="checkbox"/> \$32.50	<input type="checkbox"/> \$63.75	<input type="checkbox"/> \$93.75

Mail to: ERS-NASS
P.O. Box 1608
Rockville, MD 20849-1608

Use purchase orders, checks drawn on U.S. banks, cashier's checks, or international money orders. *Make payable to ERS-NASS.*

ATTACH MAILING LABEL HERE

Credit Card Orders:

☐ Master/Card ☐ VISA Total charges \$_____

Credit card number:

Credit card expiration date:

For fastest service, call toll free, 1-800-999-6779 (8:30-5:00 ET)